

NORTH DAKOTA
STATE UNIVERSITY

NDSU

2021-23
BIENNIAL BUDGET REQUEST
NDSU » AGENCY 235
DEAN L. BRESCIANI PRESIDENT

SENATE APPROPRIATIONS
SENATOR RAY HOLMBERG, CHAIRMAN
JANUARY 20, 2021



North Dakota State University is pleased to submit for consideration this agency review and summary for the 2021-23 biennial budget request.

INTRODUCTION

As the state's land-grant institution, NDSU has a longstanding commitment to bringing educational opportunities and research solutions to the people of North Dakota. Our commitment remains focused on affordable access to a high quality education for our students and serving state interests in a manner demonstrating sound stewardship and accountability.

NDSU excels in its support of the state's leading economic engine of agriculture, while also excelling in Engineering, Health Professions, pharmaceutical, biological and physical sciences. As the SBHE's designated site for high-performance computing, NDSU's Center for Computationally Assisted Science and Technology (CCAST) provides the super-computing facilities and staffing backbone for those data intensive disciplines, and is critical to key N.D. initiatives, particularly in the UAS industry.

Our graduates also enjoy an exceptional job placement rate in their field of study, exhibit a steadily increasing level of residency in the state after graduation, and make record-setting contributions to the state's tax base. From another perspective, the university's success also has led to continued record research and development expenditures, licensing revenues and new business growth, as well as subsequent job creation.

As NDSU continues to evolve and grow, we also continue our commitment to affordability, efficiency and productivity. That commitment is reflected in the success of our students, local and service region communities and the statewide economic interests we serve. We look forward and remain committed to addressing the needs and aspirations of North Dakota by building on our land-grant foundation.

AGENCY OVERVIEW

Agency Statutory Authority ND Constitution, Section 215, North Dakota Century Code Chapter 15-12

AGENCY DESCRIPTION

As the state's land-grant institution, NDSU has a longstanding commitment to bringing educational opportunities and research solutions to the people of North Dakota. Our commitment remains focused on affordable access to a high quality education for our students and serving state interests in a manner demonstrating sound stewardship and accountability. We are truly a student focused, land-grant, research university. NDSU's continued success has led to higher national and international visibility, not just for itself but the entire state, and most importantly, more substantial contributions to the success of North Dakota and the nation.

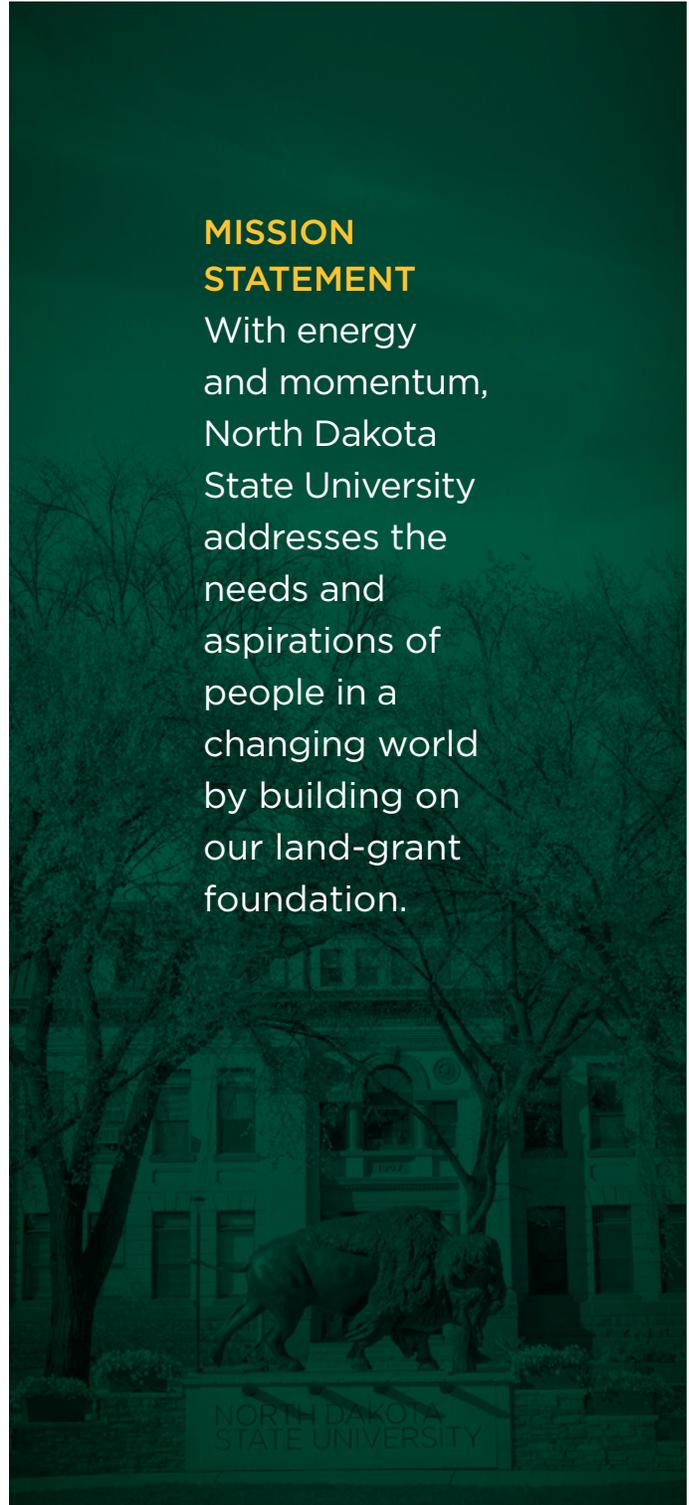
NDSU enjoys demand from both in- and out-of-state students seeking a traditional full-time, residential experience leading to graduation in four years from a rigorous research university environment. NDSU leads the state in the enrollment of firsttime freshmen, and NDSU remains the largest university in the state in terms of overall full-time enrollment. NDSU graduates also enjoy an exceptional job placement rate in their field of study, exhibit a steadily increasing level of residency in the state after graduation, and make record-setting contributions to the state's tax base. From another perspective, the university's success also has led to continued record research and development expenditures, licensing revenues and new business growth, as well as subsequent job creation.

Our signature programs include Engineering (largest discipline enrollment), Agriculture (largest NDSU research productivity), and Health Professions (2nd largest discipline enrollment with nationally ranked programs for Pharmacy and Nursing). Collaborative programs include a wide variety of research collaborations with other leading research universities around the country. Additionally, NDSU has a reverse transfer agreement "Pathways" program with NDSCS and collaborative courses and programs with other ND University System institutions, DSU, VCSU, MiSU. Graduate programs in public health and biomedical engineering are offered jointly between NDSU and UND. We also provide administrative payroll services for NDSCS, VCSU, DSU and WSC.

As NDSU continues to evolve, adapt and thrive, we also continue our commitment to affordability, efficiency and productivity. That commitment is reflected in the success of our students, local and service region communities and the statewide economic interests we serve. We look forward and remain committed to addressing the needs and aspirations of North Dakota by building on our land-grant foundation.

MISSION STATEMENT

With energy and momentum, North Dakota State University addresses the needs and aspirations of people in a changing world by building on our land-grant foundation.



AGENCY PERFORMANCE MEASURES

NDUS has adopted several data systems that help incorporate accountability measures and transparent reporting in accordance with the Board’s vision and strategic plan. These data systems, including Dashboards, Predictive Analytic Reporting, Strategic Planning Online, and the State Longitudinal Data System, provide public reports on completion and retention rates, semester-by-semester enrollment, peer comparisons, financial aid and tuition, and much more.

Additionally, the publicly-available data available throughout the systems provides real-time data to researchers and decision-makers. These analytical tools complement the system’s biennial report on its strategic plan, which incorporates the “flexibility with accountability” expectations created in Senate Bill 2003 passed by the 2001 Legislative Assembly.



AGENCY FUTURE CRITICAL ISSUES

NDSU’s productivity and national visibility combined with the attractiveness of the surrounding community and the state’s current economic strength have led to strong student demand by both undergraduate and graduate students, scholars and entrepreneurs eager to bring their research and business ideas to an environment that supports their success. Our future strategic focus, recently codified by a comprehensive academic masterplan, is focused toward science, engineering, technology, public health and agricultural fields represented by the STEM disciplines. NDSU’s future critical issues are:

- Manage resources to address changing demographics, enrollment trends and effects of the pandemic.
- Provide resources to support faculty and staffing of academic areas and support functions while meeting the needs of student demand. Prior to the devastating cuts in budget and subsequently personnel in the last two legislative sessions, NDSU had been able to provide increasing resources to support faculty and staffing of academic areas and support functions while meeting the needs of student demand.
- Continue to provide up to date classroom facilities equipped to meet the educational, technological and physical needs of our students.
- Continue to provide and maintain a safe and secure environment for students, faculty and staff.

NDSU understands its responsibility to evaluate and purposefully consider opportunities for collaboration and to find efficiencies across its academic programs and all other activities. Over the past several years we have undergone a comprehensive strategic planning process to evaluate those areas in which it is best positioned to lead, support, collaborate or contribute to the success of its constituencies.

Additionally, NDSU continues to identify those areas in which it is not best positioned or cannot efficiently lead with excellence in addressing demands of the state and nation, and must support collaboration with or redirection of state necessities to NDUS institutions better positioned to meet such demands.

At the same time, the University has also pursued a number of initiatives ranging from curriculum reviews, and restructuring of tuition, fees and course load expectations to purposeful collaboration with other state post-secondary institutions. Just a few current examples of such collaboration include development of undergraduate and graduate programs with Minot State (social work and human development), and NDSCS (the “Pathways” program, and the establishment of a two-year liberal arts preparatory program in the Fargo area.

AGENCY MAJOR ACCOMPLISHMENTS



NDSU elevated retention to a state-leading 78.9 percent and leads the state in graduation rates.

1. Ranked by the National Science Foundation (NSF) as ND's only top-100 public research university. In that category, NDSU is 94th in nation in total R&D expenditures. Research productivity leads the state and in recent years climbed as high as \$156.0 million as reported to the NSF.
2. Led the state in license and patent revenues and have in recent years climbed as high as nearly \$2.0 million.
3. Continued its competitive advantage to: enroll largest number of fulltime students; enroll largest number of fulltime undergraduates from ND; enroll largest number of fulltime undergraduates from out-of-state; enroll largest number of engineering students; enroll largest number of nursing students; elevated entering class average high school GPA to 3.50 and average ACT score to 23.7; elevated retention to state leading 78.9 percent; elevated graduation rate to state leading 41.2 percent; and nationally ranked and state leading affordability and subsequent return on investment (ROI).
4. Achieved post-graduation success rates (employment/graduate study) are 93 percent for undergraduate students and 94 percent for graduate students.
5. Achieved the state's highest pass rate on professional licensures and certifications by graduates.



The recently completed Aldevron Tower is a six-story, privately funded building with a focus on team-based education.

6. Ranked among the best overall NCAA Division-I programs in the nation.
7. Operated at full capacity the award-winning 55-acre Research & Technology Park, home to John Deere Electronic Solutions and Appareo Systems, along with ND's leading business incubator.
8. Maintained the largest physical footprint in the state: main campus, seven major research and extension centers and extension offices in every county of North Dakota total almost 20,000 acres.
9. Completed construction of Aldevron Tower, connected to Sudro Hall, a 74,000 square foot, six-story building. This is a \$28.0 million, fully privately-funded building with a focus on team-based education.
10. Started construction on Sugihara Hall, which will be a laboratory intensive building with approximately 106,000 square feet.
11. Provided collaborative programs in: a wide variety of funded research collaborations with other leading research universities around the country; reversed transfer agreement "Pathways" program and other shared services with NDSCS, and collaborative NDSU courses and programs with other System institutions (DSU, VCSU, MiSU, etc.); offered jointly with UND graduate programs in public health and biomedical engineering; and provided payroll services for NDSCS, VCSU, DSU and WSC.

PROGRAM NARRATIVE

AGENCY EXPLANATION OF PROGRAM COSTS

Salaries and fringe benefits continue to make up the majority of NDSU's expenses, representing approximately 74% of the University's state educational and general operating expenses in the most recent fiscal year. At NDSU, in order to achieve and sustain the University's viability and recognition as a leading student focused, land-grant, research university, sufficient funding is required for competitive compensation and start-up packages for faculty and staff, along with the capacity to retain those faculty and staff in a performance-based, market driven environment.

Non-salary operating expenses represent the remaining 26% of the state education and general fund operating expenses. NDSU's focus on operational efficiencies allow us to continue to meet student demand of both undergraduate and graduate students, as well as support our ability to attract scholars and entrepreneurs eager to bring research and business ideas to an environment that supports their success.



PROGRAM GOALS AND OBJECTIVES

NDSU is proud of its tradition as the state's student focused, land-grant, research institution. It embraces that responsibility as a cornerstone of its future productivity. NDSU prides itself on the contributions it can make to North Dakota and the state's residents, as well as to the country and world. NDSU continues to excel in providing accessible and affordable education to academically prepared students. Research productivity remains strong; our faculty compete successfully for corporate, state, and federal research grants, and our creative activity is vibrant and diverse.

The program goals and objectives for NDSU are in 3 major functional areas: academic programs, research and public service. In order to meet these objectives NDSU strives to provide: 1) high quality, best practice instruction in curricula approved by the State Board of Higher Education to meet student needs 2) community and statewide educational services and on line, distance education programs at the collegiate level 3) a culture of scholarly activity, including research and creative activity. The University's expectation is that research and other scholarly activities will provide vitality and relevance necessary for superior instruction and public service and strengthen North Dakota's economic future. NDSU's strategic vision provides the guiding document for pursuing these objectives and for resource allocation, and its strategic plan delineates strategies for student success, expansion of the research enterprise, and outreach to the citizens of North Dakota.

In support of these goals and objectives, student services and institutional support is necessary. NDSU must meet the needs of students by providing traditional and innovative programs to assist in the total development of the student. In response to the pandemic, NDSU has fully adopted the HyFlex (Fall 2020) learning model which synchronously incorporates traditional in-person classes with remote learning. These efforts support student achievement/academic excellence through career preparation and development. We promote a better quality of life for our students through wellness programs, the provision of alcohol-free social activities, counseling and personal growth opportunities, as well as services for first generation students, veterans, and students with disabilities.

NDSU's institutional support provides administrative leadership and direction of the University academically, economically, and physically; coordinating all institutional affairs and operating guidelines of the University; and ensuring compliance with policies established by the State Board of Higher Education.



PROGRAM PERFORMANCE MEASURES

NDUS has adopted several data systems that help incorporate accountability measures and transparent reporting in accordance with the Board’s vision and strategic plan. These data systems, including Dashboards, Predictive Analytic Reporting, Strategic Planning Online, and the State Longitudinal Data System, provide public reports on completion and retention rates, semester-by-semester enrollment, peer comparisons, financial aid and tuition, and much more. Additionally, the publicly-available data available throughout the systems provides real-time data to researchers and decision-makers. These analytical tools complement the system’s biennial report on its strategic plan, which incorporates the “flexibility with accountability” expectations created in Senate Bill 2003 passed by the 2001 Legislative Assembly.

PROGRAM STATISTICAL DATA

NDSU consists of nine colleges: College of Agriculture, Food Systems and Natural Resources; College of Arts, Humanities, and Social Sciences; College of Business; College of Engineering; College of Human Sciences and Education; College of Health Professions; College of Science and Mathematics; College of University Studies and the College of Graduate and Interdisciplinary Studies.

The programs of study include 51 graduate doctoral programs; 83 master degree programs and professional masters programs (software engineering, electrical and computer engineering, logistical and urban systems); over 100 bachelor degree programs; 1 specialist program (Education Leadership); 18 graduate level certificate programs and undergraduate certificate programs.

The NDSU campus includes over 100 buildings (either owned or fully leased). Currently, NDSU leases spaces off campus to house the offices and facilities of the Center Heritage Renewal, the Institute for Regional Studies and University Archives, a warehouse for Facilities Management, and is the location for the monthly State Surplus Auctions (West Building 41,500sq ft). Additionally, 23,400 sq. feet of space is leased at the Stop & Go development (north side of 19th Avenue and east of University Avenue) which currently houses the departments of Human Resources, Payroll, and Child & Family Services. Our goal is to have all departments on campus, where suitable and as space becomes available.

Complementing NDSU are 8 NDSU Research Extension Centers representing 18,853 acres and physical assets estimated at over \$840M:

- Carrington Research Extension Center
- Dickinson Research Extension Center
- NDSU Main Experiment Station
- Hettinger Research Extension Center
- Langdon Research Extension Center
- Minot North Central Research Extension Center

FALL 2020 ENROLLMENT



TOTAL ENROLLMENT	Undergraduate	Professional	Graduate	Total
	10,555	344	1,947	12,846
NORTH DAKOTA	4,519	172	918	5,609
Cass	2,324	96	566	2,986
Burleigh	575	18	78	671
Morton	142	4	25	171
Grand Forks	130	7	22	159
Richland	127	5	22	154
Ward	117	3	27	147
Stutsman	75	1	21	97
Stark	77	2	5	84
Williams	73	4	7	84
Barnes	59		25	84
Walsh	61	5	5	71
Traill	41	2	13	56
Dickey	38	3	7	48
McLean	39	1	4	44
Mercer	40	2	1	43
Sargent	31		7	38
Ramsey	33	2	2	37
Ransom	34		3	37
Bowman	30		3	33
McHenry	24	1	8	33
Pierce	24	1	8	33
Bottineau	26	1	5	32
Wells	20		12	32
Lamoure	26	2	3	31
Foster	26	2	1	29
Rolette	26		3	29
McKenzie	25		3	28
Benson	22	1	3	26
Emmons	22		4	26
Pembina	20		4	24
Renville	20	1	1	22
Mountrail	16	2	2	20
McIntosh	17	1	1	19
Cavalier	13	1	3	17
Eddy	15			15
Steele	12		3	15
Adams	13		1	14
Hettinger	13		1	14
Kidder	11		3	14
Dunn	8	1	1	10
Golden Valley	9		1	10
Grant	10			10
Logan	10			10
Nelson	8		1	9
Griggs	5	1	1	7
Sheridan	6		1	7
Towner	6	1		7
Oliver	6			6
Burke	5			5
Divide	3	1		4
Sioux	3		1	4
Billings	2			2
Slope	1			1
MINNESOTA	5,253	158	365	5,776
OTHER	783	14	664	1,461
TOTAL	10,555	344	1,947	12,846

PERFORMANCE INDICATORS

RETENTION	2016-17	2017-18	2018-19	2019-20	2020-21
First-year retention	79.60%	79.10%	78.90%	78.90%	82.00%
Second-year retention	69.80%	71.99%	71.35%	71.05%	72.09%
4 year graduation rate	32.40%	35.00%	37.80%	41.22%	43.27%
6 year graduation rate	55.50%	58.00%	57.60%	60.32%	62.33%
OTHER INDICATORS	2016-17	2017-18	2018-19	2019-20	
Student-faculty ratio	17:1	18:1	19:1	18:1	
Percentage of first-year students taking at least 15 credits	73%	79%	83%	81%	



NDSU RESEARCH OVERVIEW

NDSU IS RANKED 94 AMONG ALL PUBLIC INSTITUTIONS; 138 AMONG ALL INSTITUTIONS; AND 110 AMONG NON-MEDICAL SCHOOLS.



TOP 100

NSF RANKING

For FY18, NDSU is listed in the top 100 research universities in the U.S. in these categories:

- Agricultural Sciences
- Business Management and Business
- Communications
- Computer Sciences
- Natural Resources and Conservation Science
- Political Science and Government
- Social Sciences
- Sociology, Demography, and Population Studies
- Visual and Performing Arts

>\$2.04B

RESEARCH EXPENDITURES SINCE FY2004
 \$152.4M in FY2019, per NSF Higher Education Research and Development (HERD) Survey
(FY19 submitted and accepted by the National Science Foundation but is not yet published)

NDSU RESEARCH ACCOMPLISHMENTS

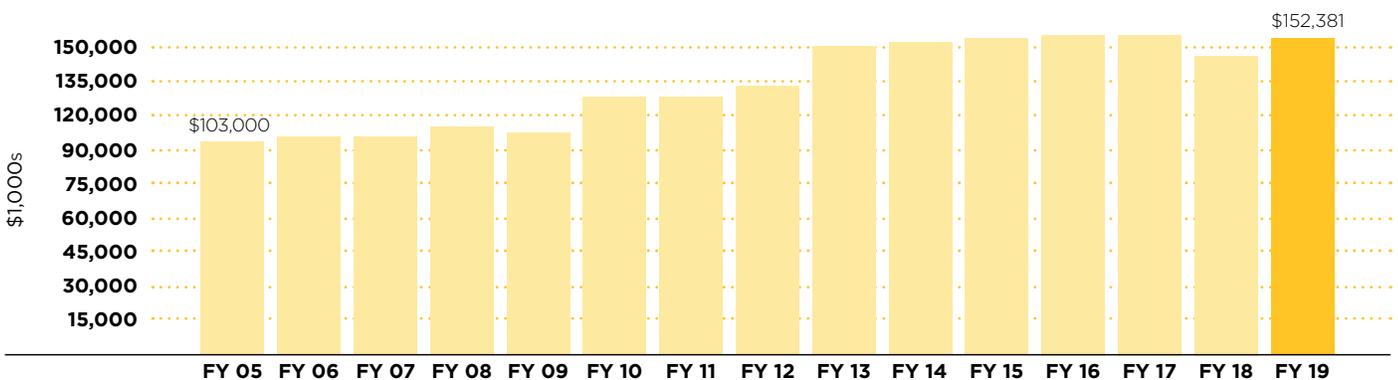
FY19 PROPOSALS PROCESSED THROUGH SPONSORED PROGRAMS ADMINISTRATION

Private sector	80
Commodity Groups	297
Federal agencies	490
Foundations	230
Other	6
Other Governmental Offices	30
State/Local.....	86
TOTAL.....	1,219



GROWTH OF NDSU RESEARCH AND DEVELOPMENT EXPENDITURES

MORE THAN \$2.04 BILLION IN RESEARCH EXPENDITURES SINCE FY2004; \$152.4 MILLION IN FY2019



Source: National Science Foundation Higher Education Research & Development Survey *FY19 reported to and accepted by National Science Foundations but is not yet published.

RESEARCH FOUNDATION ACCOMPLISHMENTS

380+

MORE THAN 380 TECHNOLOGIES/IP UNDER MANAGEMENT

30+

AVERAGING MORE THAN 30 POTENTIALLY PATENTABLE INVENTIONS PER YEAR SINCE 2004

55

55 U.S. ISSUED PATENTS
37 PENDING PATENT APPLICATIONS

66

66 ACTIVE US PVP CERTIFICATES
22 FOREIGN PBR REGISTRATIONS
35 REGISTERED U.S. TRADEMARKS
20 FOREIGN REGISTERED TRADEMARKS
12 PENDING PVP APPLICATIONS

\$2.6M

\$2.6 MILLION IN LICENSING REVENUE FROM NDSU IP IN FY19

6

6 STARTUPS BASED UPON NDSU TECHNOLOGIES AND/OR IP SINCE 2010:

- Elinor Specialty Coatings, LLC
- c2renew Inc.
- Renuvix, LLC
- C2sensor Inc.
- Uniqarta, Inc.
- Dark Horse Technologies



RESEARCH CORPORATE PARTNERS

PRIVATE SECTOR PARTNERS ENGAGED IN R&D WITH NDSU RESEARCH (INCLUDING CENTERS OF EXCELLENCE, CENTERS OF RESEARCH EXCELLENCE, RESEARCH ND, OR OTHER CENTERS/UNITS)

3M	Falkirk Mining Company	New Generation Supplements
Adaptive Surface Technologies, Inc	Ford Motor Company	North American Coal Corporation
ADM	Fortus Medical	North Dakota Pharmacy Service Corporation
AdvanSix	Frotime LLC	Northern Plains Railroad
Akzo Nobel Coatings Inc	Futamura	Northern Plains Sustainable Agriculture Society
AmeriFlax	GA Group	Northwest Green Chemistry
American Crystal Sugar Company	GC Innovation	Nuseed
American Simmental Association	Google Inc.	Oklahoma Transit Association
AMVAC Chemical Corporation	GreenDot Bioplastics	ONEOK, Inc
Ardent Mills	GreenLight Biosciences, Inc.	PepsiCo. Inc.
AURI	Horizon Resources	Pioneer Hi-Bred International Inc.
BASF Corporation	Hyundai	Plant Impact
Benson Hill Biosystems, Inc	Idaho Forest Group Timber LLC	PMI Nutritional Additives
BioConsortia, Inc	Indigo Agriculture, Inc.	Powder Coating Research Group
Biogemma USA Corp	J.R. Simplot Company	PPG Industries
Bioplastics Magazine	Kimberly-Clark Corporation	Purina Mills
Blue Cross & Blue Shield of ND	Kinesio Taping Association International	Rapha Global
BNI Energy, LTD	Koch Ag & Energy LP	RheTech
Boehringer-Ingelheim	Koch Industries, Inc	Roquette America, Inc
Boeing Commerical Airplane Company	Lignite Energy Council	RWDC
Branson Ultrasonics	Lonza	Shaw
Brewer's Association, Inc	Macaulay-Brown Inc	Sherwin Williams
c2sensor	Marathon Petroleum Corporation	Shimadzu Scientific Instruments
Center for Bioplastic and Biocomposites	M-Base	Shire
CHS, Inc.	Meadowlark	Speculoop, LLC
Cogi, Inc.	Medtronic	Sunstrand LLC
Comfort King	Merck & Company Inc.	Syngenta Crop Protection Inc.
Corteva Agriscience	Microsoft Corporation	Synoptic Data Corp.
Coteau Properties Company	Mid-American Athletic Trainers' Association	TimeCloud Inc.
Cotton Incorporated	Monsanto Company	Uniqarta
Covestro LLC	Mosaic Company	Valent BioSciences LLC
Coyote Creek Mining Company. LLC	Multimin USA, Inc	Valent USA
D&M Industries	Myriad Mobile	Valspar Corporation
Danimer	Native American Fiber Program	Voxtelesys
Dark Horse	NatureWorks LLC	Weave Got Maille LLC
Deere & Company	ND Corn Council	Westrock
Doodlebug Beverages	ND Farmers' Union	WSP USA Corporation
Dow AgroSciences	ND Insurance Reserve Fund	Zila Works
Dukane Ultrasonics	ND Petroleum Council	Zymergen, Inc.
Eastman Chemical Company	ND Rural Rehabilitation Corp.	
ECS-GEC JV	ND School Nutrition Association	
Elsevier Science	ND Township Officers Association	
EVOLVE GOLF	ND Trade Office	

FINAL ENROLLMENT OF HB 1003

NORTH DAKOTA STATE UNIVERSITY	
2017-19 Adjusted General Fund Base Appropriation	\$128,591,042
2019-21 Base proposed adjustments:	
1/ Funding formula: Credit hour completion adjustment	(716,330)
	-
2/ Salary compensation package* <i>see note below</i>	2,679,025
3/ 2019-21 Health insurance increases	2,164,246
	-
Total Base adjustments	4,123,941
Base General Fund Request and Recommendation	\$132,714,983
<i>GF Base % change</i>	3.2%
<i>GF Base \$ change</i>	\$4,123,941
One time General Funds:	
4/ Campus Network Upgrades (HB103, sec 32)	\$1,500,000

1/ SCH formula production change

2/ Senate Engrossed budget includes a FY20 minimum of \$120 per month-max of \$200 per month for a -2.0% | 2.5% compensation package

3/ Includes fully funded health insurance

4/Legislature approved \$1.5M in one-time funding from BND profits for campus network upgrades (SB1003, section 32).

Other Legislative Assembly approval:

SB 2297-Project Authorizations

Approved bonding for Dunbar Hall replacement \$40M; remaining SF \$3.2M and \$8M GF cash = total \$51.3M

Approved bonding for Agriculture Product Development Center \$20M; along with \$20M GF cash + other funds \$20M = total \$60M

CARES FUNDING

NDSU RECEIVED CARES FUNDING OF \$22,671,414

AS OF OCT. 1, 2020, \$4.0M WAS TURNED BACK TO ND OFFICE OF MANAGEMENT AND BUDGET



EXECUTIVE SUMMARY OVERVIEW

On April 29, the North Dakota State Board of Higher Education unanimously passed a motion indicating that the eleven institutions within the North Dakota University System should be open and in-person for classes starting with the Fall, 2020 semester. This is an important step which will help achieve multiple goals: (1) allowing the students to return to the in-person education environment in order to maximize learning outcomes and the overall collegiate experience; (2) helping the local, regional and state economies through student/parent expenditures and workforce participation; and (3) helping to stabilize the financial position of each of the eleven institutions and thereby mitigate potential reductions-in-force which would add to the state's unemployment numbers.

In order to accomplish these goals, we must reduce the risk of viral spread on campus and have effective contingency plans for dealing with positive cases. From a public health perspective, this mitigates risk to the community. From an economic perspective, risk mitigation and planning will encourage students, parents and employees to return for the fall semester. The process of opening the campuses in the midst of a pandemic will take a great deal of creativity and capital. The campuses have the creativity but need the capital. The request that we have put forward reflects our vision for NDSU in the age of COVID-19. It's a world that seamlessly and synchronously integrates in-person teaching with remote instruction in as close to a "normal" manner as possible. It's a world where students and faculty that are vulnerable, in isolation or in quarantine, can still effectively teach, learn and be an active part of the NDSU community.

The cornerstone of our plan is a new, highly-flexible educational delivery format known as HyFlex (short for hybrid flexibility). Through technology, the HyFlex model blends the in-person classroom with the virtual classroom and enables NDSU to maintain its traditional classes while synchronously incorporating

students/faculty who are vulnerable, in quarantine or in isolation. This model combines the best of the traditional and virtual educational environments and allows for unified delivery of educational services regardless of location. Thinking beyond the current crisis, this technology will enable NDSU to improve its educational services for years to come. A significant portion of our request involves the acquisition/installation of the necessary technology along with training costs.

In addition, our commitment to students goes well beyond in-class education. NDSU prides itself on providing holistic, experience-rich opportunities for its students. We have thousands of students who live, eat, work and recreate on campus. We have plans to provide reduced-risk services, including telehealth/telecounseling, and virtual academic advising, career counseling and writing workshops.

Finally, our plans involve improvements to our physical space to reduce viral spread including masks, retail-shields, increased sanitation supplies, awareness campaigns, isolation/quarantine residences, etc. We also intend to utilize remote work opportunities, which help vulnerable employees, and lead to lower infection rates and less absenteeism.

It is important to note that time is of the essence regarding this request. Post-secondary institutions across the country as well as K-12 institutions will be attempting to order the same types of equipment. This could result in supply chain backlogs. In addition, we will need time to install the new equipment and train faculty in its use before the start of the semester in mid-August.

A financial summary has been included and the subsections below provide a more detailed description of the three parts of our proposal (education services, student services and physical safety/telework). If there are any questions or if you need more detail about any of these topics, we can readily provide additional information.



ENHANCING EDUCATIONAL SERVICES

March 13 was the last day of in-person classes before NDSU converted to virtual education. Both the faculty and the students accomplished an amazing transformation in a very short time period, but it was far from ideal. Unfortunately, the risk of COVID-19 has not disappeared and there is no certainty as to its timeline. To continue our education virtually for an indefinite time period is not realistic. Instead, we intend to provide our in-person educational services in a new, highly-flexible format. The term being used across the country for this model is HyFlex education. Through technology, the HyFlex model blends the in-person classroom with the virtual classroom and enables NDSU to maintain its traditional classes while synchronously incorporating students/faculty who are vulnerable, in quarantine or in isolation.

We have continuously heard from our students that they want to return to the in-person environment as soon as possible. However, given the uncertainty of future conditions, we are asking our faculty to deliver their courses simultaneously to differently-located students. They must plan for students in the room. They must also plan for students attending remotely throughout the semester. They must plan for students who may get ill and have to isolate for a period of time. In addition, faculty need technology to teach the class remotely in the event that they themselves are vulnerable or become ill.

To make this possible, our request to OMB includes a significant amount of proposed IT infrastructure. We propose adding video conferencing capabilities to most classrooms on campus. The equipment will allow for face-to-face instruction and for students to attend remotely. To the greatest extent possible, classrooms would have the same equipment, so instructors would not have to learn more than one set of equipment. This would allow for uniform support from IT staff and a predictable experience for instructors and students, whether they are remote or in the classroom. To ensure reliable performance from all campus classrooms, we request funding to enhance network capabilities in academic and residential buildings.

In addition, in the event that the University must go fully online again, instructors must also plan a virtual-only version of their course, where all students would be attending from home. While we have already experienced this once, the quick switch mid-semester to emergency remote instruction did not create ideal remote learning experiences for students. There are successful models for online classes, but they require time to create. Because faculty are not normally under contract in the summer (meaning they are not paid or required to teach), we must provide additional compensation for them to modify their classes for all these contingencies. Properly planned online courses would provide a much better learning experience for students, which will positively impact student retention. Our request also includes additional support to address extra costs from reducing class sizes to facilitate social distancing. We have space limitations in our classrooms which prevents effective social distancing. As a result, we need to offer more sections of the same class. We propose hiring additional graduate assistants so that we can split classes and offer multiple sections (possibly at alternate times) and support students and instructors with online courses.

A variety of teaching software will also be needed to facilitate instruction if either students or faculty need to be outside the classroom for health-related reasons. Simulations for labs and medical records are available for courses in Anatomy and Physiology, Biology and Microbiology, and Dietetics.

Specialized equipment will facilitate face-to-face and in-class instruction for programs in Engineering and Interior Design. Simulation software is also available for courses in Business and Hospitality and Tourism Management. A variety of advanced technologies will enable Disability Student Services to meet federal requirements to accommodate students with documented learning or physical disabilities.

ENHANCING STUDENT SERVICES

NDSU prides itself on providing holistic, experience-rich opportunities for its students. In this world, our commitment to our students goes well beyond the in-class education. We have thousands of students that live on campus, eat on campus, work on campus and recreate on campus. The experiences that students have outside the classroom are oftentimes as meaningful and educational as what happens inside the classroom. As mentioned above, our students have made it loud and clear that they want to return to in-person environment because they miss those experiences.

We are looking at and appropriately modifying our practices in order to reduce the risk of exposure while trying to ensure a rich experience. As with the educational services, our creativity is limited by our resources. If the request is granted, we can help ensure that students have a better experience in a reduced-risk environment.

For example, student demand for mental health services has remained strong during the pandemic. Our providers had to rapidly adapt to the need for telehealth services. Both the Counseling Center which serves NDSU students, and the Community Counseling Center which trains graduate level counselors and supervisors and serves NDSU, NDSCS and the community, have identified a variety of needs. Our Student Health Center has also identified needs. Collectively, equipment to practice telemedicine, replace PPE supplies, purchase/renew digital licenses for various medical/counseling services, additional counselors, additional custodial services at the student health clinic, additional phone lines to facilitate communication, and improved medical records management systems are examples of costs incurred.

In addition, NDSU has identified several needs in the area of Academic Support, Career and Advising Services, and Orientation. Expenses will include a virtual career fair platform, salary costs for additional tutors and overload pay for academic advisors, enabling the Center for Writers to conduct writing workshops and dissertation boot-camps remotely, and overall staffing costs of outreach and support to the student body, whether remotely or on-campus.

Lastly, in addition to the CARES funding targeted directly at students, NDSU has an emergency fund that students can access for basic necessities such as food, rent, utility costs, repairs or emergency travel.

That fund was exhausted very quickly during spring semester. The NDSU Foundation raised over \$30,000 in a campaign to replenish that fund, but that was also quickly depleted. Therefore, we are requesting \$50,000.00 for Additional Emergency Fund Grants for students for Summer and Fall semesters.



ENHANCING PHYSICAL SAFETY AND TELEWORK

We all fervently hope that there is definitive resolution to the COVID-19. Until that time, we need to plan for how we manage our physical environment and our employees. These plans will incorporate numerous aspects such as masks, retail-shields, increased sanitation supplies, awareness campaigns, isolation/quarantine residences, etc. NDSU has included increased security technology, including card-access limitations so that buildings can be limited to particular individuals.

An effective method of social distancing is to identify workers who can and should work remotely. This helps employees with vulnerabilities as well as employees who are caretakers of the vulnerable. It also helps the employer because it lowers the amount of potential virus in the workplace leading to lower infection rates and less absenteeism. Finally, it helps the community by helping to stop the spread of the infection.

For these reasons, NDSU has had numerous employees working remotely, and we would like to enable some of them to continue to do so. We are requesting additional equipment and supplies for faculty and staff to work remotely. Items include head-sets, high-definition video cameras, tablets (including digital drawing pads for faculty and students), laptops, additional monitors and document cameras.

We are also asking for funding to upgrade conference rooms to seamlessly incorporate in-person and virtual meetings. This will help remote workers be incorporated into meeting spaces, and long term, should help make the state more efficient by potentially reducing the need for intrastate travel.

NDSU CARES ACT FUNDING: APPROVED JUNE 2020

NDSU REQUEST	CATEGORY	JUNE 2020 APPROVED CARES FUNDING
ENHANCING EDUCATIONAL SERVICES	Digitization of course materials	
	Augmented Reality for Human Anatomy and Physiology	\$3,000
	Case Simulations, Food and Beverage	\$1,000
	MBA online simulation software	\$1,875
	Digitization of courses	
	Lecture capture	\$35,000
	Digitization of labs	
	Labster Site License	\$30,000
	SimBio Virtual Labs/Tutorials software	\$10,380
	Digitization of process	
	Electronic health records	\$1,000
	Equipment	
	Equipment for Teaching Labs	\$60,000
	HyFlex Course Development and Delivery	
	Instructional Designer	\$12,000
	Instructional Re-design	\$6,394,000
	IT equipment	
	BLips Microphones	\$2,112
	Instructional Re-design	\$13,000
	Tablets and accessories	\$65,000
	*Installation of equipment to facilitate hybrid synchronous instruction	
	IT Infrastructure equipment	
	Classroom technology	\$2,500,000
	Network infrastructure	\$1,500,000
	Social Distancing measure	
	Classroom technology support	\$ -
	Extra Class sections	\$ -
	COVID-19 response: additional duties staff and faculty	\$ -
Software and Cloud Services		
Academic Computing in the Azure Cloud	\$65,000	
Virtual classroom and office		
Videoconferencing software	\$55,000	
Enhancing Educational Services Total		\$10,748,367
ENHANCING PHYSICAL SAFETY AND TELEWORK	Digitization of process	
	Dining Services mobile ordering	\$145,000
	Electronic Lab Notebook	\$31,250
	Interactive Supercomputing	\$75,000
	Residence Hall Room Condition forms	\$3,500
	Equipment	
	Digital Communication signage	\$400,000
	Distance/virtual spaces in the Memorial Union	\$215,000
	Keyless Entry with Card Access	\$ -
	Security Cameras	\$ -
	IT equipment	
	*Software and equipment to facilitate remote work for VPN	\$1,150,000
	IT equipment	
Conference rooms equipped for virtual meetings	\$750,000	
Laptops for faculty and staff	\$525,000	

NDSU REQUEST	CATEGORY	JUNE 2020 APPROVED CARES FUNDING
ENHANCING PHYSICAL SAFETY AND TELEWORK	Tablets and accessories	\$8,400
	IT Infrastructure equipment	
	Virtual Private Network	\$200,000
	Prevention and Sanitation equipment	
	Disinfecting equipment	\$117,000
	Sanitizing Stations	\$100,000
	Touchless equipment	\$397,000
	UV Plasma Ionization units	\$100,000
	Prevention and Sanitation supplies	
	Dining Services take out/disposable containers	\$375,000
	Walk up spaces plexi-glass shields	\$200,000
	PPE/thermometers	\$639,250
	Cleaning supplies	\$263,500
	Student welcome to campus packets (incl facemasks, sanitizer)	\$80,000
	Social Distancing measure	
	Isolation Dorm staffing	\$15,000
	MAT Bus (Add'l buses)	\$310,548
Printed Communication	\$52,000	
Video Communication	\$15,000	
	Enhancing Physical Safety and Telework Total	\$6,167,448
ENHANCING STUDENT SERVICES	Course re-design	
	Study service Re-design	\$ -
	Digitization of process	
	Dissertation process	\$ -
	Virtual Career Fair Platform	\$ -
	Emergency Grants for Students	
	Student Emergency Grants	\$ -
	IT equipment	
	SWIVL cameras	\$ -
	Webcams monitor and Mic	\$ -
	Telepresence devices and controls	\$ -
	Tele-health services laptops	\$ -
	IT Infrastructure equipment	
	Residence Hall Wireless modernization	\$1,300,000
	Social Distancing measure	
	Captioning Service	\$ -
	Disability Services add'l staffing	\$ -
Remote Student Advising	\$ -	
Student Success Programs	\$ -	
Add'l staff time/duties to support social distancing		
Staff overloads	\$1,200,000	
Student Mental Health		
Beck Depression Inventory	\$ -	
Mental Health tracking application	\$ -	
Beck Anxiety Inventory	\$ -	
Add'l Counseling Services	\$ -	
	Enhancing Student Services Total	\$2,500,000
	Grand Total	\$19,415,815
	Add'l pay for IT Help desk, virus related research	\$47,272
	ND Forest Service OT	\$48,244
	PPE	\$90,534
	Add'l cleaning supplies	\$57,979
	Technology	\$66,808
	Misc Protective supplies/equipment	\$42,009
	Telework equipment	\$19,961
	Total March-May actual list	\$372,807
	TOTAL OMB RECOMMENDATION FOR CARES FUNDING	\$19,788,622

NDSU CARES ACT FUNDING: APPROVED AUGUST 2020

CATEGORY	ITEM NAME	AUGUST 2020 APPROVED CARES FUNDING	
MEDICAL /PROTECTIVE SUPPLIES	Plexiglass Plexiglass shield for classroom, office and walk up spaces	\$60,000	
	Touchless equipment Automatic faucets and flush valves	\$30,000	
	Medical/protective supplies total	\$90,000	
PUBLIC AREAS AND FACILITY DISINFECTION	Cleaning supplies Cleaning/disinfectant supplies: cleaning solution, towels, dispensers, sanitizer, can liners, gloves, masks, UV type lightbulbs, portable HEPA filters	\$40,000	
	Isolation dorm equipment Food self-service equipment for students in isolation	\$10,000	
	Public areas and facility disinfection total	\$50,000	
FACILITATE TELEWORK	Laptops for faculty and staff	\$ -	
	Facilitate Telework Total	\$ -	
FACILITATE DISTANCE LEARNING-HYFLEX MODEL	Captioning Service Regular + Cart service scale up	\$ -	
	Electronic Library resources Online learning resources to support HyFlex learning	\$ -	
	HyFlex equipment for students Laptops and accessories for needs based students to support HyFlex academic coursework	\$ -	
	Site license costs for HyFlex instruction Software and license fees for virtual lab tools for microbiology labs	\$ -	
	Contracted classroom installation Procure contracted labor for installing equipment in instrumented classrooms and meeting spaces	\$ -	
	IT devices and accessories Microphones, webcams, silicone keyboard sleeves classroom equipment for Hyflex instruction	\$ -	
	Learning integrity platform Provides protoring and other academic integrity applications	\$ -	
	Facilitate Distance Learning-HyFlex model total	\$ -	
	FACILITATE DISTANCE LEARNING-BEHAVIORAL HEALTH	Student Wellness Beck Anxiety inventory, convert from paper to electronic	\$5,396
		Beck Depression inventory, convert from paper to electronic	\$5,396
Mental health related app to be used as part of the Center's stepped-care mode of providing services. This WellTrak license is a one year cost to help us get through the crisis.		\$14,000	
Facilitate Distance Learning-Behavioral Health Total		\$24,792	
IMPROVE PHYSICAL DISTANCING MEASURES-BLDG AND EQUIPMENT	Keyless Entry with Card Access Exterior and interior door card access points to control access, provide security for classroom and/or residence halls	\$ -	
	Security Cameras Exterior building security	\$ -	
	Improve Physical Distancing Measures-Bldg & Equip Total	\$ -	
	Grand Total	\$164,792	
	Additional funding for HVAC related projects: Improved air quality-HVAC system modifications	\$2,520,000	
	Self-contained air scrubbing equipment (portable)	\$126,000	
	Improved air quality-HVAC Filters, supplies, modifications	\$72,000	
	Total request	\$2,882,792	



NDSU 2021-23 BIENNIAL BUDGET REQUEST

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2021-23 BIENNIAL BUDGET REQUEST

NDSU HAS PREPARED A NEEDS BASED BUDGET FOR CONSIDERATION AS APPROVED AND DIRECTED BY THE NORTH DAKOTA SBHE.

BASE BUDGET REQUEST

Formula decrease due to student credit hour production	\$(29,096)
Salary compensation increase 3% each year (excluding benefits)	\$3,547,510
Base Budget Increase	\$3,518,414

OPTIONAL BASE BUDGET REQUEST

Student share of 3% compensation increase <i>in lieu of 1.7% tuition increase (excluding benefits)</i>	\$5,646,026
Funding formula 2.5% SCH rate increase	\$3,317,147
Optional Base Budget Increase	\$8,963,173

OPTIONAL ONE-TIME DEFICIENCY REQUEST

Legal Settlement	\$125,000
Deficiency Appropriation	\$474,657
Optional One-time Budget Increase	\$599,657

TOTAL BASE AND ONE-TIME REQUESTS	\$13,081,244
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CAPITAL PROJECT REQUEST

General Fund Project

Agriculture Products Development Center	\$14,000,000
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Total project \$60m approved by 66th Legislative Assembly (2019)

BASE FUNDING REQUESTS:

HE FUNDING FORMULA - SCH PRODUCTION CHANGES: (\$29,096)

N.D.C.C. 15-18.2-5 provides the campuses with “base funding per adjusted student credit hour (ASCH). Current rates are \$97.06 for community colleges; \$90.98 at four-year regional universities; and \$60.87 at research universities.

As a result of the SCH production NDSU’s decrease is (\$29,096). General operating expense will be adjusted for this change in production.

2021-23 SALARY INCREASES: \$3,547,510 GENERAL FUNDS

The SBHE requests an average salary increase of 3% for all employees in each year of the 2021-23 biennium. Salary increases are critical to recruit and retain the best employees to ensure the ongoing success of higher education in North Dakota.

At NDSU the average 3% annual salary increase is estimated at \$3,547,510 in general funds, excluding benefits.

OPTIONAL FUNDING REQUESTS:

STUDENT SHARE OF 2021-23 SALARY

COMPENSATION PACKAGE INCREASE: \$5,656,026

SBHE is requesting an average salary increase of 3% for all employees in each year of the 2021-23 biennium.

College affordability is a significant factor in student access, retention and completion. Tuition and fee rates are a major component of affordability. Any tuition increase, particularly in the current economy, could prohibit students from obtaining the education needed to join the ND workforce.

NDSU is requesting \$5,646,026 in general funds, which represents the student share of the proposed 2021-23 salary increase. Funds would replace a 1.7% annual tuition increase (excluding benefits) for the biennium.

HE FUNDING FORMULA SCH

RATE INCREASE: \$3,317,147

The SBHE requests a 2.5% increase in the statutory funding formula rates established in N.D.C.C. 15-18.2-5. Current rates are \$97.06 for community colleges; \$90.98 at four-year regional universities; and \$60.87 at research universities.

At NDSU a 2.5% funding formula increase would generate \$3,317,147. Funds would be allocated in support of NDSU's strategic plan and general operations; including instructional and academic support, salaries for faculty and staff, operating costs, equipment, campus designated deferred maintenance and/or facility renovations and fit-up projects.

LEGAL SETTLEMENT: \$125,000

NDSU entered into a Settlement Agreement and Release, dated November 7, 2019, with the approval of the SBHE, which ended the construction litigation pertaining to the A. Glenn Hill Center. Pursuant to the Settlement Agreement, NDSU paid the plaintiff \$38,609.38 which was the amount remaining of the Legislative authorization for the project.

In addition, NDSU agreed to seek Legislative authorization and general fund appropriation for an additional payment to the plaintiff of \$125,000. NDSU could not make this payment without Legislative authorization pursuant to NDCC 54-27-12.

DEFICIENCY APPROPRIATION: \$474,657

On January 16, 2018 NDSU was served with a complaint for claims arising out of the A. Glenn Hill Center construction project. NDSU was authorized to: (1) retain outside counsel and defend the lawsuit including initiating 3rd-party actions; and (2) establish a deficiency fund to pay the costs of the litigation in the expectation that NDSU would seek reimbursement of such costs through a deficiency appropriation in a future legislative session. The litigation ultimately involved nine different parties and settled prior to trial pursuant to a Settlement Agreement and Release, dated November 7, 2019, which was approved by the SBHE. NDSU is seeking a deficiency appropriation to cover the litigation costs.

REQUEST: \$14,000,000 GENERAL FUNDS

The 66th Legislative Assembly (2019) approved \$60m for the project, with \$40m in state bonds, plus \$20m local funds/fundraising. NDSU has committed to raise \$6.0m and is now requesting \$14.0m in state general funds in lieu of the remaining local fundraising.

**TITLE OF PROJECT: AG PRODUCTS DEVELOPMENT CENTER (HARRIS HALL AND MEATS LAB REPLACEMENT)
\$61,200,000 (INCLUDES \$1.2M INFLATION)
NDSU PRIORITY #1 APPROVED BY SBHE**

PROJECT TYPE BASED ON PERCENTAGE OF COST AS PER NDSU MASTER PLAN SECTION 3.

10% PED PED 4 (College of Agriculture, Food Systems and Natural Resources)

75% DMP DMP 2 (Harris Hall)

15% LSS

MASTER PLAN ALIGNMENT

The mainstay of the agricultural industry in the state is the ability of North Dakota to continue producing and marketing superior crop and livestock commodities worldwide. North Dakota is the leading state in production of spring wheat, durum wheat, barley, pulses, and flax. In 2018, the on-farm value of wheat, corn, and soybean crops in the state exceeded \$5.32 billion.

In conjunction, a new facility that houses crop quality, food science, and meat science teaching and research programs is critical to maintaining or advancing the cereal chemistry/cereal quality, food science, meat science, and food safety and security programs that exist at NDSU. These programs are not only important in ensuring food security for the citizens of North Dakota and the surrounding region but also in the ability to trade the state's products internationally. The new building is also necessary to address the health, safety, food grade and code issues of the current facilities – Harris Hall and the Meats Lab – and to provide for improved efficiencies by co-locating necessary core research, teaching, and outreach areas in one unit.

HARRIS HALL

Harris Hall was completed in 1953 and houses the quality laboratories for spring wheat, winter wheat, durum wheat, barley, pulses, corn, and flax. Current research and teaching activities in Harris include:

- Crop quality surveys necessary and vital to food processing industries in the U.S. and globally
- Crop quality research essential to the development of new varieties that have traits desired by the food industry
- Food processing (baking, brewing, canning, extrusion, food fermentation, malting, milling)
- Food ingredient and product development: all the labs provide research and outreach to end users of each of the crops, and their programs are key to the development and release of crop varieties that are critically important to the state's economy. A factor affecting this, however, is that the facility has become deficient in the following areas over the years:

- Appropriate HVAC is inadequate, resulting in recirculation of grain dust generated by milling cereals, pulses and oilseeds. This poses a health risk, as well as creating conditions conducive to explosion and fire as the building is not equipped with an adequate fire suppression system. The facility is in, or near, violation for lack of appropriate emergency showers in laboratory areas, eyewash stations, and other worker safety-related issues. For instance, one such eyewash station is located in the middle of a corridor.
- The HVAC system is also inadequate in controlling building temperatures. Temperature issues have occurred with the increasing amount of technical equipment required for activities in the building. Portable air conditioning units are used as a temporary solution; however, their use impacts research quality, overloads the electrical system, and creates obstructions and safety concerns.
- The electrical system is at maximum capacity. New equipment vital to undergraduate programs and research activity cannot be connected to the system, thereby, limiting their success. Fire is also a concern due to the age of the system, especially since the building does not contain sprinklers. Many of the electrical panels still utilize fuses that regularly trip during the day, disrupting experiments, classes and research. In some areas, employees need to determine whether to use a computer, lights, or AC because using all three simultaneously will blow a fuse.
- The electrical system is lacking the proper voltage and power for the type of modern technical equipment used in today's industry. NDSU has received donated equipment from outside industry that cannot be used due to the current electrical system.
- Teaching and research laboratory spaces need to be separated. Besides separation for safety reasons, commodity groups have paid for research activities and equipment that have general use restrictions.

- The laboratories require distilled and/or purified water for research. However, most of the building's water lines are too corroded to achieve the required water quality level so researchers must carry water to holding tanks for use. The only partially treated water system in the building is currently located in a men's bathroom.
- The cast iron domestic waste lines are beyond their useful life. Because of their condition, the plumbing shop has a difficult time finding adequate piping to connect to when a section needs replacement. Repair patches generally don't hold, which result in recurrent leaks throughout the system.
- The building has limited accessibility. The only access to an elevator is through the adjacent Northern Crops Institute building.

Together with enhanced technologies occurring in wheat and other crops, the need to evaluate new materials for quality traits will require separate HVAC systems. This will prevent unintended presence of regulated traits in conventionally developed crops and will allow larger and focused collaborations with industry.

MEATS LAB

Shepperd Arena opened in March 1952. It consisted of a livestock arena, livestock arrival rooms and a meat laboratory that was designed to demonstrate limited-scale on-farm slaughtering and meat science. The arena continues as the largest physical space in the building today, along with classrooms, academic function areas, and the Meats Lab, which houses meat science teaching and research activities. This lab is essential for operating with other disciplines to improve meat and muscle quality, nutritional quality, and consumer sensory traits; carrying out research and teaching in Meat Science for the state's cattle, sheep and swine livestock industries; and providing outreach to its end users. The livestock industry's economic contribution to the state, which exceeded \$1.14 billion for the three species in 2018, would be further enhanced by expanding the research efforts in meat science. However, the following areas in the Meats Lab facility are restricting this progress:

- Cleaning/sanitizing/sterilizing the facility is difficult due to a poor HVAC system, no integrity of the floor, and poor insulation of refrigerated/freezing facilities, increasing the potential for mold and bacterial growth.
- Shared ventilation system between the arena and Meats Lab can cause contamination and issues with dust, creating a concern for product that is sold, for academic teaching, and for quality meat research.
- Insufficient meat cooling and storage areas limit research and teaching capabilities.
- Cramped, poorly designed research and meat handling labs impact student learning opportunities and further impede research in meat science.



- Additional space is needed for the next level of new technologies, such as computer aided imaging and meat grading research.
- Lack of sensory evaluation facilities impacts and reduces the ability to carry out the critical research component of consumer preferences.

Sensory evaluation, which includes assessment of flavor, smell, and appearance of food made from plant and animal origin, is another important component of food product development or evaluation. The kitchen used to prepare food for sensory evaluation must meet food grade standards because the food will be consumed as part of the evaluation. The ventilation system for the kitchen must be isolated from the evaluation laboratory so evaluators are not influenced by extraneous odors. No such facility currently exists on campus.

Laboratories preparing food products for sensory evaluation need to meet state laws for food service. In addition, research laboratories where research will be conducted using regulated traits need to meet federal guidelines. Meat Science facilities require USDA inspection and approval. Nearly all of the current food grade labs do not meet present day North Dakota Department of Health standards in these areas. This is a significant deficiency in the current buildings.

The food science industries for food grade commodities, such as soybean, dry bean, pulses, corn, potato, and other commodities, rely on research programs to provide quality analyses. The livestock industry relies on research carried out at the Meats Lab to improve meat quality through improved nutrition, genetics, handling, and husbandry. Thus, these

food safety, meat science, and food security programs are far-reaching in their academic and research agendas. Each program area relies on food science-based research to ensure a safe and nourishing food supply that is in compliance with the FDA Food Safety Modernization Act approved and signed into law in 2011. These academic, research, and outreach programs involve both undergraduate and graduate education. The cereal chemistry/cereal quality program is only one of two in the nation and the food safety program is the only one in the nation that offers certificate, B.S., M.S., and Ph.D. degrees. The meat science program is a crucial component of the animal sciences research and teaching programs, addressing research and teaching for multiple livestock species including cattle, swine, and sheep. In addition, the meats science research program addresses research concerns related to muscle biology, the conversion of muscle to meat, and post-harvest practices aimed at improving meat quality. Research in food and in food safety provides necessary information that can be used to make science-based decisions on food security issues regionally and throughout the world.

If an adequate facility is not built, NDSU and the state will continue to lose out on research opportunities for both crops and livestock. Constructing an innovative and forwardlooking facility to meet the issues today and well into the future will allow our researchers to enhance their competitiveness for Federal and industry grants, allow our students the opportunity to be educated using current technologies needed throughout the food industry, and provide our stakeholders with critical and timely information to remain competitive in a global economy.

North Dakota State University is a Land Grant Research University, and the activities in Harris Hall and the Meats Lab are consistent with its teaching, research and public service responsibilities, particularly in regards to agriculture. Agriculture aligns with the needs and core values of North Dakota. Improving research, along with providing quality classroom space and supporting agricultural needs, is consistent with the NDSU Master Plan.

SCOPE OF WORK

A new advanced facility will be constructed at a new site on the west side of campus for ease of truck and vehicle access. The three-to-four story building will be designed with high ceilings in first floor areas to accommodate large milling equipment and chain hoists for meat and crop materials. Truck access to products in the crop and meat areas will allow for safe delivery and pick-up. The new facility would house shared quality, analytical and sensory laboratories with high-tech analytical equipment that could be utilized by multiple users and foster affiliations between crops and meats programs. Bio-processing of crops and co-products, product development, and end-use evaluation will also benefit. The new facility will promote

collaborative research and interactions among scientists, thereby making our scientists more competitive in obtaining extramural funding. The facility would also meet all codes, especially health codes dealing with food products and safety.

The activities in Harris Hall and the Meats Lab operate year-round. NDSU explored options to temporarily relocate these activities during the project but found that doing so was cost prohibitive, especially for sensitive research equipment, or impractical for students to do their academic work off campus. Therefore, a new facility will be constructed and the existing equipment moved to it to minimize downtime. In some cases, new equipment will be installed so no downtime will be necessary. Additional laboratory space will be included that will be adaptive to the many research assistance requests received by NDSU and that will also enhance the university's ability to partner with Federal and State agencies and private industry.

Harris Hall is not a sprinkled building and is physically attached to Northern Crops Institute (NCI). There is a high risk of fire or explosion due to the dust created by the activities in both of these buildings. However, Harris Hall will be razed once the new building is constructed, placing NCI in a more secure situation because the new facility will be sprinkled.

Based on NDSU's Building Condition Report, Harris Hall is one of the two academic buildings on campus in the poorest condition. Its demolition is supported because the amount of deferred maintenance for the facility exceeds the 65% replacement value threshold. This will remove an estimated \$7.1 million of deferred maintenance from NDSU's list. In addition, the poorest Lord and Burnham Greenhouse will also be razed. The greenhouses have sustained major storm damage over the last few years, thereby limiting activities occurring in them. The deferred maintenance value for the greenhouses exceeds 65% of the replacement value threshold so their demolition is also warranted. This will remove an estimated \$2.54 million from NDSU's deferred maintenance list. The Meats Lab in Shepperd Hall will be repurposed for other agricultural activities and academic functions.

A new facility dedicated to the above areas would enhance the university's ability to obtain competitive grants and partner with Federal and State agencies and with industry. Undergraduate and graduate students would also benefit from the improved teaching and research space that will provide greater opportunities for their research programs.

AG PRODUCTS DEVELOPMENT CENTER

THIS NEW FACILITY IS CURRENTLY RATED AS PRIORITY #1 FOR NDSU STATE FUNDED PROJECTS. IT IS ESTIMATED TO TAKE 18-TO-24 MONTHS TO COMPLETE THE WORK NEEDED FOR THIS PROJECT.

PROJECT COST ESTIMATE

Ag Products Development Center
Project Total \$ 61,200,000

Construction Costs

General	\$ 23,488,000
Mechanical	\$ 16,396,000
Electrical	\$ 7,126,000
Site Work	\$ 1,487,000
Landscaping	\$ -
Demolition (Included in General)	\$ -
IT	\$ 1,784,000
Other	\$ -
Sub Total	\$ 50,281,000
Contingency	2,514,000
Total Construction	\$ 52,795,000

Soft Costs

Design Fees	\$ 3,963,000
Owner Costs	\$ 360,000
Permits	\$ 45,000
Advertising	\$ 2,000
Other	\$ 740,000
Sub Total	\$ 5,110,000
Contingency	\$ 150,000
Total Soft Costs	\$5,260,000

FF&E - Property Costs

FF&E	\$ 3,145,000
Land Acquisition	\$ -
Total FF&E/Other	\$3,145,000

The total project cost is estimated at \$61,200,000, which includes FF&E. NDSU will construct the new facility, move equipment from Harris Hall and Shepperd Arena into the new facility, remove the environmental issues (asbestos, lead and mold) from Harris Hall, and then raze Harris Hall and the poorest of the Lord and Burnham greenhouses.

FUTURE OPERATING COSTS

Current custodial support will transfer to the new building and one additional custodian will need to be hired. Other salaries to cover electrical, HVAC, plumbing and carpentry will also be included. The utilities will increase slightly with the additional equipment included in the facility but will be offset by the savings in demolishing the greenhouse.

FURNITURE, FIXTURES AND EQUIPMENT

NDSU is requesting that the funds, including some FF&E, be provided by general fund appropriation. Some FF&E may also be funded by grants or gifts.

SOURCE OF FUNDS

1. General funds \$14M
2. State bonds \$40M
3. Other funds (private) \$6M
4. Inflation \$1.2M

The Ag Products Development Center was included in SB2297 of the sixty-sixth legislative assembly in the amount of \$60,000,000 [\$20,000,000 State Bonding, \$20,000,000 Special Fund Authority, \$20,000,000 general fund cash from 2017-19.]

Section 1. Project Authorizations – Appropriation. 2. states:

- *North Dakota state university may obtain and utilize local funds obtained from fundraising or other sources for the agriculture products development center project. There is appropriated to North Dakota state university the sum of \$20,000,000, or so much of the sum as may be necessary, from any local or other funds that may become available for this project for the period beginning with the effective date of this Act, and ending June 30, 2021.*
- *The industrial commission may issue evidences of indebtedness for the agriculture products development center project only if North Dakota state university certifies to the industrial commission and the director of the office of management and budget that \$20,000,000 of local and other funds has been obtained for the project or if North Dakota state university receives approval for a change in project scope from the legislative assembly or budget section pursuant to section 48-01.2-25.*
- **September 26, 2019:** The SBHE authorized the SBHE Budget and Finance Committee's recommendation for "NDSU to increase the special fund authority for the Ag Products Development Center from \$6,000,000 to \$20,000,000 as per SB2297."
- The Ag Products Development Center was ranked as NDSU Priority #2 in the 2019-2021 Capital Project Budget Request submitted for consideration by the SBHE for recommendation in the 2019-21 biennial budget in June 2018. It appeared as Priority #12 in the 2019-21 Capital Project Request Recommendations – NDUS Facility Planning.
- **May 23, 2018:** The SBHE authorized the SBHE Budget and Finance Committee's recommendation for "NDSU to begin a formal fund raising campaign for a portion of the Ag Products Development Center through the NDSU Foundation and Alumni Association with a target amount of \$6,000,000. A state general fund appropriation will be requested for the remaining \$54,000,000 of the project."

SHARED SERVICES/EFFICIENCIES/PHASING – PLANNING

As stated above, a new facility would house quality laboratories for important crops and colocate Meat Science research and teaching efforts in order to gain efficiencies and minimize duplication of core facilities. A new facility would foster collaborative research and interactions among scientists and create a better learning environment for students. The new facility would also house shared analytical laboratories with state-of-the-art analytical equipment that could be shared by multiple users. This, in turn, would make our scientists more competitive in obtaining extramural funding.

Based on NDSU's Building Condition Report, Harris Hall is one of the top two poorest academic buildings on campus containing classrooms and laboratories. The Meats Lab is also in very poor condition, resulting in increased operating costs and challenges in maintaining USDA approval to operate. This project will correct deferred maintenance on plumbing, electrical, structural, and animal handling issues that reduce the effectiveness of the current facilities.

Agriculture is a leading industry in the state and building a new facility to accommodate crop and meat quality/chemistry/ utilization, food science, and food safety/security is crucial for NDSU and the State of North Dakota. The State Board of Agriculture Research and Education (SBARE) endorses this project. State crop and livestock commodity groups are also strongly supportive of this project.

The proposed facility is an integration of core research and teaching laboratories, milling rooms, seed and food storage rooms, livestock handling pens, kill floor, meat preparation facilities, freezers, coolers, kitchens, and sensory laboratories associated with support labs for analytical lab work. When originally proposed, thorough evaluation of the need for separate space for novel genetic research, meat science, bioprocessing, food science teaching and research, and food security teaching and research needs were not completely explored and matched with faculty needs. The Food Science academic program requires national accreditation. The Meat Science lab requires USDA inspection and approval. Due to the intricacies of the various laboratories and support areas, this project cannot be constructed in phases. The only piece that could be funded later is demolition of Harris Hall.

HB 1025 NDSU LITIGATION EXPENSES

After completing construction of the A. Glenn Hill Center in late 2016, the project's general contractor, Roers Construction, Inc. (the "GC") alleged that NDSU owed the GC an additional \$1,317,403 based on claimed delays and increased costs during the construction process. NDSU disputed the allegations, and NDSU was served with a lawsuit on January 16, 2018.

Subcontractors and other parties involved in the construction project were brought into the litigation, and ultimately, there were a total of nine parties. Upon completion of extensive discovery, but prior to summary judgment motions and a possible trial, the parties reached a global settlement with the assistance of a mediator. The settlement negotiations were complicated due to the fact that there were nine parties together with their attorneys and insurance companies. The amounts paid by the other parties are confidential and not known to NDSU. NDSU signed the settlement agreement on November 15, 2019 contingent upon the approval of the State Board of Higher Education. The SBHE approved the agreement on December 3, 2019.

NDSU has a two-part obligation under the settlement:

1. NDSU has paid \$38,609.38 to the plaintiff. This represented the remaining balance of the legislative authorization on the A. Glenn Hill Center project and included retainage.
2. NDSU agreed to seek a legislative appropriation for an additional payment to the GC in the amount of \$125,000 in the next session. Under the settlement agreements, NDSU may make this payment only if the Legislature authorizes and appropriates funding for the payment.

The rationale for this settlement was that the above-referenced payments to settle the case were significantly less than the estimated litigation costs to continue with the case, bring a dispositive motion, and potentially try the case and resulting appeals. This meant that if NDSU continued with the litigation and did not settle, the ongoing costs would have likely exceeded the settlement amount, and in addition, there was the potential for an adverse judgment compounding the financial risk. On this basis, NDSU's litigation counsel recommended that NDSU agree to the settlement terms.

Research Infrastructure

Keeping ND Higher Education Competitive

Executive Summary

The University of North Dakota and North Dakota State University are requesting base funding to support research infrastructure on both campuses. This request is for **(1) connectivity to Internet2**, which connects more than 300 research universities to each other and to national laboratories (e.g., Los Alamos National Laboratory) and **(2) computational research** services which support an increasing number of research activities including UAS systems and precision agriculture.

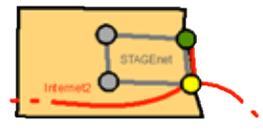
Financial Summary

Item	Annual	Biennium
Internet2 UND Share	\$ 325,000	\$ 650,000
Internet2 NDSU Share	\$ 325,000	\$ 650,000
CRC (UND Computational Research)	\$ 775,550	\$ 1,551,100
CCAST (NDSU Computational Research)	\$ 774,552	\$ 1,549,104
Total	\$ 2,200,102	\$ 4,400,204

Note: The request of the 66th Legislative Assembly was \$5.7M.

Internet2

[Internet2](#) connects over 300 research universities to each other and to national laboratories. It provides researchers access to federal research facilities, advanced collaboration opportunities with researchers at other institutions, and is a prerequisite for applying for many federal grant opportunities. Additionally, in-state infrastructure connects computational research centers at UND and NDSU, facilitating the universities complementary research programs.



Computational Research

Computational research centers currently exist at both UND (Computational Research Center or CRC) and NDSU (Center for Computationally Assisted Science and Technology or CCAST). These centers offer services appropriated to the different types of research happening at each of the research universities. The need for both facilities and support staff with specialized skills (e.g., data analytics or cloud computing) has been steadily growing and outpaced available resources at both institutions. Aligning this base level of research infrastructure with the demands of researchers is critical to maintain North Dakota’s ability to compete for grant funds and contracts.



NDSU 2021-23 EXECUTIVE RECOMMENDATION

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2021-23 Comparison of SBHE General Funds Budget Request to Executive Recommendation	North Dakota State University		
	SBHE 2021-23 GF Budget Request	Executive Recommendation	Executive Recommendation Over (Under) Budget Request
2019-21 Adjusted General Fund Appropriation, Net of Base Adjustments(Needs Based Budget Request)	\$ 132,714,983	\$ 132,714,983	-
Base adjustments:			
1/ Funding formula: Credit Hour completion adjustment	(29,096)	(29,096)	-
2/ Funding formula 7.5% reduction	-	(9,951,442)	(9,951,442)
3/ Salary/benefit compensation: request 3%/3%; Gov 2%/2%	3,547,510	2,258,394	(1,289,116)
4/ 2021-23 Health insurance increases	-	23,494	23,494
5/ Student share of compensation increase in lieu of 1.7% tuition increase (excluding benefit amount)	5,646,026	-	(5,646,026)
6/ Funding formula: 2.5% operating rate increase	3,317,147	-	(3,317,147)
One-time adjustments:			
Legal Settlement	125,000	125,000	-
Total Base and One-time Adjustments	12,606,587	(7,573,650)	(20,180,237)
General Fund Request & Exec Recommendation	\$ 145,321,570	\$ 125,141,333	\$ (20,180,237)
	9.5%	-5.7%	
Capital Project: Agriculture Products Development Center (State of ND Bonding Authority) Total project authorization \$60M.	\$ 14,000,000	\$ 14,000,000	-
2021-23 Total General Funds-Base, One-time and Capital Project	159,321,570	139,141,333	(20,180,237)

1/ Student Credit Hour production change

2/ Executive Recommendation: reduction in amount per student credit hour of (-\$3.52); from \$60.87 to \$57.35. The proposed reduction would result in cuts to existing faculty, staff and/or academic college closure.

3/ Salary compensation amounts reflect General Fund amounts only.

5/ Request for compensation increase to cover the portion funded by student tuition. If not funded, tuition will need to increase by a minimum of 1.7% each year of the biennium.

6/ At NDSU a 2.5% funding formula increase would generate \$3,317,147. Funds would be allocated in support of NDSU's strategic plan and general operations; including instructional and academic support, salaries for faculty and staff, operating costs, equipment, campus designated deferred maintenance and/or facility renovations and fit-up projects.

North Dakota State University

Statutory Authority

ND Constitution Section 215, North Dakota Century Code Chapter 15-12.

Agency Description

As the state's land-grant institution, NDSU has a longstanding commitment to bringing educational opportunities and research solutions to the people of North Dakota. Our commitment remains focused on affordable access to a high quality education for our students and serving state interests in a manner demonstrating sound stewardship and accountability. We are truly a student focused, land-grant, research university. NDSU's continued success has led to higher national and international visibility, not just for itself but the entire state, and most importantly, more substantial contributions to the success of North Dakota and the nation.

Our signature programs include Engineering (largest discipline enrollment), Agriculture (largest NDSU research productivity), and Health Professions (2nd largest discipline enrollment with nationally ranked programs for Pharmacy and Nursing). Collaborative programs include a wide variety of research collaborations with other leading research universities around the country. Reverse transfer agreement "Pathways" program and other shared services with NDSCS and collaborative courses and programs with other ND University System institutions, DSU, VCSU, MISU. Graduate programs in public health and biomedical engineering offered jointly between NDSU and UND. We also provide administrative payroll services for NDSCS, VCSU, DSU and WSC.

Major Accomplishments

1. Ranked by the National Science Foundation (NSF) as ND's only top-100 public research university. In that category, NDSU is 94th in nation in total R&D expenditures. Research productivity leads the state and climbed as high as \$156.0 million.
2. Led the state in license and patent revenues and climbed to \$2.0 million.
3. Continued its competitive advantage to: enroll largest number of fulltime students; enroll largest number of fulltime undergraduates from; enroll largest number of number of fulltime undergraduates from out-of-state; enroll largest number of engineering students; enroll largest number of nursing students; elevated entering class average high school GPA to 3.50 and average ACT score to 23.7; elevated retention to state leading 78.9 percent; elevated graduation rate to state leading 41.2 percent; and nationally ranked and state leading affordability and subsequent return on investment (ROI).

Agency 235

4. Achieved post-graduation success rates (employment/graduate study) are 93 percent for undergraduate students and 94 percent for graduate students.
5. Achieved the state's highest pass rate on professional licensures and certifications by graduates.
6. Ranked among the best overall NCAA Division-I programs in the nation.
7. Operated at full capacity the award-winning 55-acre Research & Technology Park is home to John Deere Electronic Solutions and Appareo Systems, along with the ND's leading business incubator.
8. Maintained the largest physical footprint in the state: main campus, seven major research and extension centers and extension offices in every county of North Dakota total almost 20,000 acres.
9. Completed construction of Aldevron Tower, a 74,000 square foot, six-story building and is a \$28.0 million, fully privately-funded building with a focus on team-based education.
10. Started construction on Sughara Hall which will be a nearly 106,000 square foot, lab-intensive building.
11. Provided collaborative programs in: a wide variety of funded research collaborations with other leading research universities around the country; reversed transfer agreement "Pathways" program and other shared services with NDSCS, and collaborative NDSU courses and programs with other System institutions (DSU, VCSU, MISU, etc.); offered jointly with UND graduate programs in public health and biomedical engineering; and provided payroll services for NDSCS, VCSU, DSU and WSC.

Executive Budget Recommendation

- Reduces \$29,096 from the General Fund higher education formula due to a decrease in adjusted student credits.
- Reduces \$9.9 million from the General Fund by adjusting the base funding per student credit hour amount to 92.5 percent of current law.
- Provides \$125,000 of one time funds from the General Fund for lawsuit settlement agreement fees.
- Provides \$2.3 million from the General Fund as an inflationary increase, which includes the increase in employee health insurance and the executive compensation plan.
- Provides \$125.1 million from the General Fund for the state share of campus operations at \$57.35 per adjusted student credit hour
- Provides \$14.0 million of bonding authority for Agriculture Products Development Center.

REQUEST/RECOMMENDATION COMPARISON SUMMARY

235 North Dakota State University
Biennium: 2021-2023

Description	Expenditures Prev Biennium 2017-2019	Legislative Base 2019-2021	2021-2023 Requested		Requested Budget 2021-2023	2021-2023 Recommended		Executive Recommendation 2021-2023
			Incr(Decr)	% Chg		Incr(Decr)	% Chg	
By Major Program								
North Dakota State University	818,166,713	751,574,675	15,972,152	2.1%	767,546,827	13,226,117	1.8%	764,800,792
Total Major Programs	818,166,713	751,574,675	15,972,152	2.1%	767,546,827	13,226,117	1.8%	764,800,792
By Line Item								
Campus Operations	730,085,720	743,775,571	15,574,524	2.1%	759,350,095	(1,171,511)	(0.2%)	742,604,060
Capital Assets	35,799,104	7,799,104	397,628	5.1%	8,196,732	14,397,628	184.6%	22,196,732
Capital Assets Carryover	1,218,586	0	0	0.0%	0	0	0.0%	0
Capital Projects - Non-State	44,328,423	0	0	0.0%	0	0	0.0%	0
Capital Projects Carryover - Non-State	6,734,880	0	0	0.0%	0	0	0.0%	0
Total Line Items	818,166,713	751,574,675	15,972,152	2.1%	767,546,827	13,226,117	1.8%	764,800,792
By Funding Source								
General Fund	129,253,831	132,714,983	12,481,587	9.4%	145,196,570	(7,573,650)	(5.7%)	125,141,333
Federal Funds	0	0	0	0.0%	0	0	0.0%	0
Special Funds	688,912,882	618,859,692	3,490,565	0.6%	622,350,257	20,799,767	3.4%	639,659,459
Total Funding Source	818,166,713	751,574,675	15,972,152	2.1%	767,546,827	13,226,117	1.8%	764,800,792
Total FTE	1,895.66	1,870.16	(40.73)	(2.2%)	1,829.43	(40.73)	(2.2%)	1,829.43

SR05 - Budget Request Summary - Reporting Level

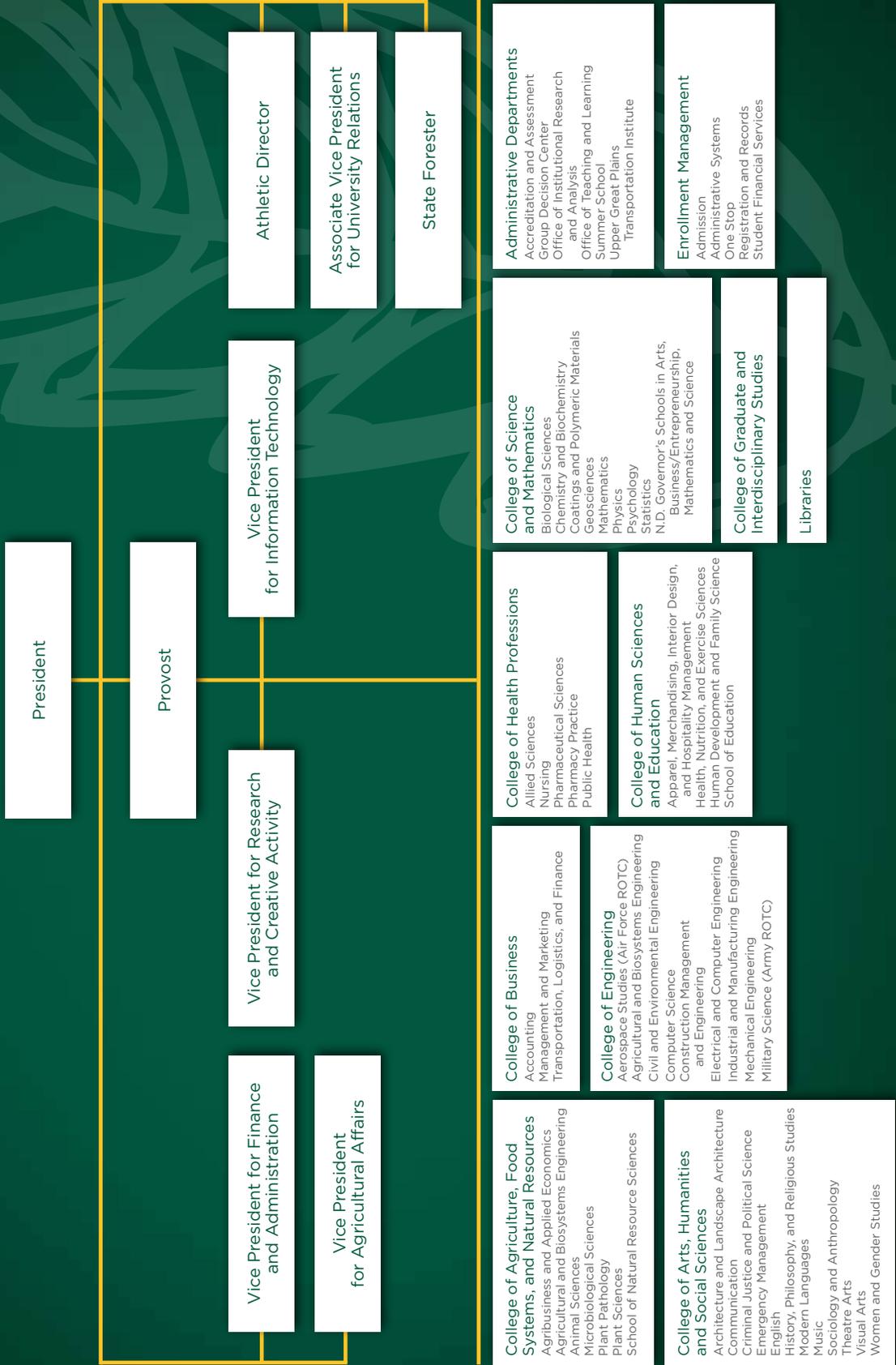
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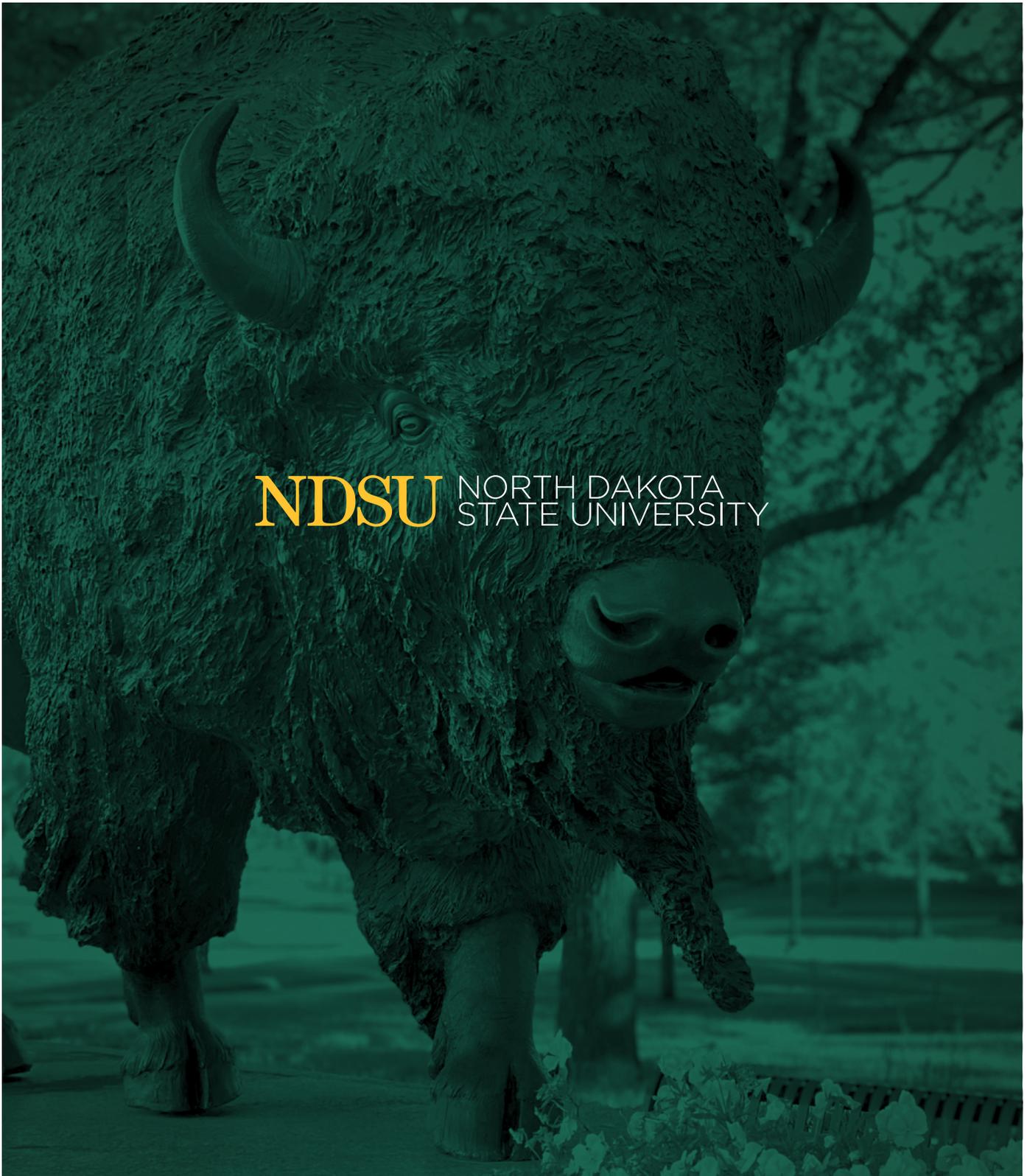
Agency North Dakota State University
 Program 100 North Dakota State University
 Reporting Level 00-235-100-00-00-00-000000000

1	2	3	4	5	6	7
Object/Revenue	2019-21 Biennium Appropriation	2021-23 Base Budget Changes	2021-23 Optional Budget Changes	2021-23 Total Changes	2021-23 Total Budget Request	
Description	Code					
EXPENDITURES						
Salaries - Permanent	511000	242,242,242	0	0	242,242,242	0
Temporary Salaries	513000	32,713,413	12,286,473	0	44,999,886	0
Fringe Benefits	516000	115,348,502	0	0	115,348,502	0
Other Taxable Compensation	518000	1,052,935	0	0	1,052,935	0
Operating Expenses	520000	0	3,288,051	0	3,288,051	0
Travel	521000	17,031,206	0	0	17,031,206	0
Supplies - IT Software	531000	5,306,015	0	0	5,306,015	0
Supply/Material-Professional	532000	15,974,482	0	0	15,974,482	0
Food and Clothing	533000	2,514,358	0	0	2,514,358	0
Bldg. Ground, Maintenance	534000	2,130,704	0	0	2,130,704	0
Miscellaneous Supplies	535000	2,237,277	0	0	2,237,277	0
Office Supplies	536000	559,661	0	0	559,661	0
Postage	541000	578,916	0	0	578,916	0
Printing	542000	2,438,729	0	0	2,438,729	0
IT Equip Under \$5,000	551000	2,898,158	0	0	2,898,158	0
Other Equip Under \$5,000	552000	4,111,559	0	0	4,111,559	0
Utilities	561000	21,646,827	0	0	21,646,827	0
Insurance	571000	1,872,678	0	0	1,872,678	0
Rentals/Leases-Equip & Other	581000	1,202,332	0	0	1,202,332	0
Rentals/Leases - Bldg/Land	582000	9,649,784	0	0	9,649,784	0
Repairs	591000	19,907,007	0	0	19,907,007	0
IT - Communications	602000	4,116,664	0	0	4,116,664	0
Professional Development	611000	3,050,100	0	0	3,050,100	0
Operating Fees and Services	621000	28,273,264	0	0	28,273,264	0
Fees - Professional Services	623000	10,851,260	0	125,000	10,976,260	0
Subcontracts and Subrecipients	624000	10,445,583	0	0	10,445,583	0
Medical, Dental and Optical	625000	1,125,108	0	0	1,125,108	0
Miscellaneous Expenses	631000	3,996,873	0	0	3,996,873	0
Cost of Good Sold	651000	113,952,259	0	0	113,952,259	0
Waivers/Scholarships/Fellowshi	661000	60,089,260	0	0	60,089,260	0
Facilities & Administration	730002	7,958,415	0	0	7,958,415	0
Campus Operations	20	745,275,571	15,574,524	125,000	759,475,095	0
Land and Buildings	682000	79,143,789	0	14,000,000	14,000,000	0
Other Capital Payments	683000	653,283	0	0	0	0
Extraordinary Repairs	684000	0	8,196,732	0	8,196,732	0
Equipment Over \$5000	691000	6,015,391	0	0	6,015,391	0
IT Equip/Software Over \$5000	693000	1,786,641	0	(5,066,860)	0	0
Capital Assets	50	87,599,104	8,196,732	14,000,000	22,196,732	0
Land and Buildings	682000	28,338,735	0	0	0	0
Capital Assets Carryover	51	28,338,735	0	0	0	0

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Agency Program Reporting Level		North Dakota State University 100 North Dakota State University 00-235-100-00-00-00-00000000					
1 Object/Revenue		2	3	4	5	6	7
Description		2019-21 Biennium Appropriation	2021-23 Base Budget Changes	2021-23 Optional Budget Changes	2021-23 Total Changes	2021-23 Total Budget Request	
Code							
Land and Buildings		96,037,293	0	0	0	0	0
Capital Projects - Non-State		96,037,293	0	0	0	0	0
Land and Buildings		204,284	0	0	0	0	0
Capital Projects Carryover - Non-State		204,284	0	0	0	0	0
Land and Buildings		5,799,192	0	0	0	0	0
Capital Building Fund		5,799,192	0	0	0	0	0
TOTAL EXPENDITURES for 100 North Dakota State University		963,254,179	23,771,256	14,125,000	15,972,152	781,671,827	0
MEANS OF FUNDING							
State General Fund		161,053,718	15,213,831	14,125,000	12,481,587	159,321,570	0
General Fund		161,053,718	15,213,831	14,125,000	12,481,587	159,321,570	0
NDSU - Auxiliary Funds		82,010,231	0	0	0	81,476,729	0
NDSU - Other Unrestricted Funds		345,969,058	8,557,425	0	3,490,565	181,506,023	0
NDSU - Other Unrestricted Plant Funds		23,748,313	0	0	0	8,894,646	0
NDSU - Grants and Contracts		77,793,695	0	0	0	77,793,695	0
NDSU - Tuition Funds		269,736,793	0	0	0	269,736,793	0
NDSU - Other Restricted Funds		2,942,371	0	0	0	2,942,371	0
Special Funds		802,200,461	8,557,425	0	3,490,565	622,350,257	0
TOTAL FUNDING for 100 North Dakota State University		963,254,179	23,771,256	14,125,000	15,972,152	781,671,827	0
AUTHORIZED EMPLOYEES							
FTE		1,720.16	0.00	0.00	(34.73)	1,685.43	0.00
Vacant		150.00	0.00	0.00	(6.00)	144.00	0.00
TOTAL AUTHORIZED EMPLOYEES for 100 North Dakota State University		1,870.16	0.00	0.00	(40.73)	1,829.43	0.00





NDSU NORTH DAKOTA
STATE UNIVERSITY

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