### UND RESPONSES TO THE APPROPRIATIONS COMMITTEE QUESTIONS

1. Cite the North Dakota Century Code chapter(s) associated with the agency and list its major statutory responsibilities.

ND Constitution Articles VIII and IX; North Dakota Century Code Sections 15-11 and 15-22

# 2. Explain the purpose of the agency's various divisions/programs - Attach organizational chart (See Appendix A for organizational chart).

The One UND Strategic Plan is the product of a process that involved more than 900 individuals coming together to craft the future of the University of North Dakota. This plan is truly an illustration of One UND, touching all corners of the University: research, enrollment, online education, creation of 21st-century programs, alumni relations, and so much more. The plan has seven goals with specific metrics to meet in areas of liberal arts, enhanced graduation rates, offering quality academic programs and enhancing our enrollments, increasing our research profile and external funding; enhancing our inclusive academic community to serve all students, serving the military, and enhancing our philanthropy to support our academic mission.

UND continues to pursue the One UND Strategic Plan goals:

Goal 1: Provide a strong undergraduate liberal arts foundation

Goal 2: Increase undergraduate, graduate and professional graduation rates

Goal 3: Deliver more educational opportunity online and on-campus

*Goal 4*: Enhance discovery at a level consistent with most research-intensive universities (Carnegie R1)

Goal 5: Foster a welcoming, safe and inclusive campus climate

*Goal 6*: Meet educational needs of active duty and reserve military personnel, veterans and their families

*Goal 7*: Attract support for the University by actively engaging alumni and donors about each goal.

Progress toward those goals can be found here: <u>https://und.edu/about/mission/strategic-plan.html</u>

# 3. Report any financial audit findings included in the most recent audit of your department or institution and action taken to address each finding.

UND and UNDSMHS did not have any audit findings on the 06/30/20 financial audit.

#### 4. Discuss current biennium accomplishments and challenges and next biennium goals and plans.

### **Biennium Accomplishments:**

- Recruited new president, Andrew Armacost, Ph.D., to lead UND. Also recruited three deans: Brad Rundquist for the College of Arts & Sciences, Brian Tande for the College of Engineering and Mines, and Bob Kraus for the John D. Odegard School of Aerospace Sciences.
- The UND Alumni Association & Foundation (UND AAF) secured a lead gift of \$20 million from the Nistler family with the help of key legislators and Governor Doug Burgum, UND and UNDAAF were able to secure a \$20 million match from the State of North Dakota. The UNDAAF raised another \$30 million for the State match to be in effect. On August 21, 2020, OMB certified that UNDAAF and UND had raised the requisite funds and that UND could initiate the construction project. The project began in the summer of 2020. As of January 2021, structural steel and concrete have been erected on the site.
- Enhanced the Chester Fritz Library facilities with safety features (sprinkler system), revised north entrance, added new logging and data access upgrades, as well as study spaces for students. In addition, the library houses a "knowledge commons," a one-stop location for students to get writing, advising, research, and other support, and an Artificial Intelligence/Virtual Reality lab in partnership with Vice President for Research & Economic Development dedicated to cuttingedge computing data visualization.
- Made significant progress on addressing more than \$500 million in deferred maintenance, including taking down more than 50 outdated buildings, and devoting 1 percent of tuition to work connected to deferred maintenance and renovation. This also includes developing a plan for more attractive student housing and higher utilization rates while identifying buildings to be taken off-line.
  - Utilized the funds from the Johnson Controls, Inc. PE to:
    - Built a new gas-fired (oil as a back-up) steam plant and also placed hedges for multiple years to ensure an inexpensive natural gas supply, making the economic structure work with minimal risk to UND. The building became operational in July 2020.
    - Utilized (still ongoing) funding from this bond to improve building infrastructure (HVAC systems, etc.) for greater efficiency.
    - Demolished the old steam plant.
  - After students voted to replace the Memorial Union, it was demolished. The current construction budget for a new union is on time and within the budget.
  - Demolished Montgomery Hall to make way for the Nistler College of Business & Public Administration (see fund-raising effort above).
- Saved students nearly \$11 million through the implementation of open-educational resources, such as open-source textbooks, learning materials, and various teaching aids that can be accessed and distributed.
- Continued to enhance and invest in the Research Institute for Automated Systems and its research portfolio on autonomous systems.
- In conjunction with Vice Chancellor Tammy Dolan and the Chancellor's Office, determined that non-HEERF funding from the Coronavirus Relief Fund (CRF) could be used to defray the cost of capital and operating expenses that were previously unbudgeted and explicitly used for creating a more resistant and resilient campus, as well assisting with synchronous and asynchronous curriculum development and remote learning, including laptop distribution on a verifiable-needs

basis. Thanks to the Governor's Office and the Legislature, this yielded over \$20 million to UND and tens of millions of dollars to the NDUS.

- Continued the Memorial Union Construction Project, which should be on budget and operational by the summer of 2021.
- Improved UND's undergraduate retention rate to 81.39%, a 3% increase.
- Steadily increased the 4-year, 5-year, and 6-year graduation rates. The 6-year graduation rate has increased from 54.6% (2012 cohort) to 61% (2013 cohort).
- Ensured undergraduates experience high-impact learning practices before they graduate. On average, students who enter UND as freshmen experience a 4.83 increase in high-impact practices during their academic careers.
- Developed 2+2 programs with Williston State College in Early Childhood Education, Elementary Education, Entrepreneurship, Nursing, and Petroleum Engineering. We are also working on program proposals for Dakota College, Lake Region State College, Dickinson State University, and Bismarck State College.
- Developed academic and corporate partnerships to grow enrollment and serve students including with an agreement with a) Rize Education, which will provide access to 66 independent, liberal arts colleges across the nation for students to continue their education at UND by completing an online UND engineering degree; b) Digi-Key & Electrical Engineering (workforce development and electrical engineering online and at the worksite specifically designed for Digi-Key employees; c) Boeing & Systems Engineering (workforce responsive online systems engineering program designed with academic and industry cooperation); and Lumerit Education, Pearson Accelerated Pathways to permit employees from nearly 50 companies to use their educational benefits to enroll in UND online engineering certificates and degree programs
- Developed our own Teaching Transformation and Development Academy to provide in-house instructional design, technology integration, and pedagogical support for faculty to develop quality online and on-campus classes. This made it possible for us to pivot to a fully online environment in the spring of 2020, more easily than other institutions.
- Developed in-demand academic programs to serve labor force needs of the state, region, and nation including undergraduate certificates in behavior health, special education, conflict mediation among others; new online undergraduate majors in cybersecurity, data science, marketing, management, among others and graduate programs in cybersecurity, data science, systems engineering, addictions counseling, and indigenous public health among others.
- Invested in academic advising to improve retention and provide faculty time for academic mentoring.

### **Challenges:**

- Maintain high-quality teaching, learning, research, and living environment during COVID-19.
- Attaining increased operational flexibility.
- Building research infrastructure and capacity.
- Addressing staff and faculty morale as a result of a stressful COVID environment and earlier reductions, which led to increased class sizes and teaching loads for many.
- Meeting the mental health needs of students.
- Recruiting quality students to UND in light of COVID financial impacts on the state and increasing competition from other institutions in state and out of state.
- Continuous improvements in undergraduate and graduate student retention.

- Balancing access and affordability with the adequacy of resources to support the delivery of high-quality/high-value programs and campus life while at the same time expanding access to our State and region with synchronous and asynchronous educational opportunities.
- Optimizing marketing by more aggressively utilizing digital channels to make the value proposition to prospective new students and individuals seeking to complete degrees or gain special accreditation.
- Refining and implementing the campus master plan in support of strategic priorities and reducing \$500 million of deferred maintenance by reducing gross square footage, improving remaining building infrastructure, and building new by employing a combination of P3, philanthropic, debt, and state support.
- Aligning One UND Strategic Plan across departments and services.
- Educating and aligning faculty and staff to be more innovative and flexible to educate and engage a changing student demographic (more students who are part-time, online, working adults, and older than traditional high school graduates).

### Next Biennium Goals and Plans:

- Continued investment in research infrastructure, including research-active faculty hires in the areas of national security, UAS, health, and other areas aligned with Grand Challenges with anticipated outcomes of increased research expenditures.
- Promote and support faculty research excellence in areas outside the Grand Challenges.
- Continued improvement in student retention across all colleges/schools at UND.
- Engage the campus in writing and submitting UND's 10-year Assurance Argument to HLC in 2023.
- Increase the number of formalized 2+2 programs with two-year NDUS institutions.
- Continue to expand online offerings to meet the labor force needs of the state and region.
- Develop data courses and academic pathways (non-degree, certificates, bachelors, and graduate degrees) in helping students understand how to use data, interpret data, and judge its reliability, validity, and applicability in specific contexts.
- Develop a short- and long-term plan for the future of education at UND through a faculty-led task force.
- Expand our offerings in the non-credit area to serve labor force needs and generate revenue for the university.
- Incentivize and provide more training to faculty to develop more open educational resources to reduce the financial burden on students.
- Enhance our campus commitment to diversity, equity, and inclusion by identifying which recommendations from the Diversity, Equity and Inclusion Task Force will be implemented.
- Continue to develop innovative methods of financing and improving operations to concentrate on core activities.
- Leverage information technology to improve efficiency and either reduce FTE or redeploy them to more productive uses.
- Continue progress on the campus master plan to reduce and eliminate deferred maintenance, improve space utilization, and modernize learning spaces.

5. Compare the agency's request/recommendation totals, including full-time equivalent (FTE) positions, for the next biennium compared to the current biennium.

Comparison of 20:	•	orth Dakota (exclud to 2021-23 SBHE Re	0	l) ve Recommendation		
	2019-21 Base Level	Requested Adjustments	2021-23 SBHE Needs-Based Budget	Executive Recommendation	Difference from 2019-21 Base Level	Difference from SBHE Needs-Based Budget
Campus Operations-General Fund	\$ 143,920,589	\$ 2,275,769	\$ 146,196,358	\$ 133,419,609	\$ (10,500,980)	\$ (12,776,749)
Capital Assets General Fund	\$ 4,411,566	Ś -	\$ 4,411,566	\$ 4,411,566	Ś -	Ś -
Campus Operations-All Other	\$ 744,185,677	\$ 10,334,621	\$ 754,520,298	\$ 756,301,488	\$ 12,115,811	\$ 1,781,190
Capital Projects - Non-State Funded (Optional Request)						
TOTAL Appropriation	\$ 892,517,832	\$ 12,610,390	\$ 905,128,222	\$ 894,132,663	\$ 1,614,831	\$ (10,995,559)
General Fund	\$ 148,332,155	\$ 2,275,769	\$ 150,607,924	\$ 137,831,175	\$ (10,500,980)	\$ (12,776,749)
Tuition Funds	\$ 221,852,780		\$ 221,852,780	\$ 221,852,780	\$ -	\$ -
Special Funds	\$ 522,332,897	\$ 10,334,621	\$ 532,667,518	\$ 534,448,708	\$ 12,115,811	\$ 1,781,190
TOTAL Funding Sources	\$ 892,517,832	\$ 12,610,390	\$ 905,128,222	\$ 894,132,663	\$ 1,614,831	\$ (10,995,559)

- FTE 2019-21 Biennial Appropriation 2,132.17
- FTE 2021-23 Base Budget Request 2,059.98
  - Reduction in FTE of 72.19. Campus decision to reduce base budgets, including the use of the Voluntary Separation Incentive Program in FY21.

# 6. Explain the funding included in each program/line item either in total or by division depending on the size of the agency:

#### a. Amounts included in the base budget and their purpose and use:

(1)	Campus Operations – General Fund Campus Operations – Tuition Campus Operations – All Other Capital Assets – General Fund <b>Revenue Total</b>	\$146,196,358 \$221,852,780 \$532,667,518 <u>\$ 4,411,566</u> <u><b>\$905,128,222</b></u>
	Salary and Fringe Benefits General Operating Cost of Goods Sold Waivers/Scholarships/Fellowships Extraordinary Repairs <b>Total Expenditures</b>	\$471,145,197 \$335,702,284 \$ 76,595,518 \$ 17,273,657 <u>\$ 4,411,566</u> <b>\$905,128,222</b>

### b. Amounts included in the request/recommendation and justification for the change from the base budget. Discuss changes relating to:

- (1) Salaries and wages: \$14,340,985
  - General fund 3% per year \$4,006,364
  - Tuition increase to cover salary increases 3% per year \$4,350,357
  - Other funds increase to cover salary increases 3% per year \$5,984,264

- (2) Operating expenses: (\$1,730,595)
  - Formula decrease due to credit production (\$1,730,595)
- (3) Capital assets: \$4,411,566 restore current extraordinary repairs allocation from funding formula
- (4) Grants: \$0.00
- (5) Any special line items: \$0.00
- (6) Estimated income Special funds: \$10,334,621. Of that total \$4,350,357 comes from a tuition increase to cover the student share of the proposed merit pool increase.
- (7) Estimated income Federal funds: \$0.00
- (8) General fund: \$2,275,769
- (9) FTE: reduction of FTE 72.19

#### 7. Discuss the purpose and use of any one-time funding items for the current biennium.

#### Extraordinary Repairs/Major Capital Projects-Carryover – \$9,807,792

- Extraordinary Repairs \$760,350
- Gamble Hall/Nistler College of Business and Public Administration (CoBPA) \$9,000,000 (SB2297)
- FY19 Retainages \$47,442

#### Capital Improvement Detail – \$21,611,433

- UND Chester Fritz Library \$17,061,637 (Other Funds)
- Student Engagement Project (J Lloyd Stone House) \$4,496,806 (Other Funds)
- Student Engagement Project (J Lloyd Stone House) \$52,990 (Challenge Grant)

#### Campus Network Upgrades – \$1,500,000 (See Appendix B for 2021-23 proposal)

- Network upgrade to support HPC and Computational Research Center
- Network upgrade in academic, research, and administrative buildings to increase throughput and redundant connections

#### Capital Assets – Off System – \$206,000,000

- Athletics High Performance \$35,000,000 (Other Funds-HB1003 & SB2297)
- Memorial Union \$80,000,000 (Revenue/ND Building Authority Bonds-HB1003)
- Deferred Maintenance Projects \$30,000,000 (Revenue/ND Building Authority Bonds-HB1003)
  - 1. Carnegie Hall DM
  - 2. Chester Fritz Auditorium DM
  - 3. Engineering Master Plan
  - 4. Gustafson Hall DM

- 5. Hyslop Sports Center DM
- 6. Merrifield Hall Renovation
- 7. O'Kelly Hall DM Work
- Gamble Hall/Nistler CoBPA \$6,000,000 (State Bonds SB2297)
- Gamble Hall/Nistler CoBPA \$55,000,000 (Other Funds HB1003 & SB2297)

### Capital Building Fund - \$8,723,602

- Capital Building Fund Tier II \$4,361,801
- Capital Building Fund Tier III \$4,361,801

Funds will be used for the campus connection off of University Avenue for the Chester Fritz Library, and the redevelopment of the old steam plant site as well as funding for the Gamble/Nistler CoBPA (pending legislative approval).

### 8. Identify and justify the need for any one-time funding being requested/recommended.

### Merrifield Hall/Twamley Hall Renovation – \$79,000,000

- \$56M state appropriations request
- \$23M local funds
- Eliminates \$132.1M in deferred maintenance
- Demolition eliminates \$88.5M in deferred maintenance
- Renovation eliminates \$43.6M in deferred maintenance
- Improved space utilization (4 connected buildings) and eliminates deferred maintenance
- 112,000 GSF of new construction
- 436,947 GSF of demolition
- 324,947 GSF net reduction

Requested funds will be used to:

- Renovate Merrifield Hall to provide adequate instructional space for non-lab programs with built-in flexibility for differing pedagogies. Repurpose Twamley Hall to accommodate Columbia Hall faculty and staff
- The renovation of Merrifield and Twamley Halls enable us to decommission Columbia Hall as we will have decanted the classroom and office activities from that building.
- Decommissioning of Gamble Hall and corresponding site improvements upon completion of Merrifield Hall and Twamley Hall renovations. Gamble Hall will provide adequate swing space throughout construction, allowing UND to maximizes its funding by permitting renovation to progress quickly and safely in unoccupied building(s).

Design would start in 2021. Construction would start in 2021 and be completed by the start of the fall 2024 semester.

# Capital Renewal Needs at John D. Odegard School of Aerospace Sciences UND Campus and Airport - \$15 million

Consistent with UND's campus facilities master plan, strategic plan, and budget planning, this request targets deferred health and safety maintenance associated with the John D. Odegard School of Aerospace Sciences. ISES's 2019 facility condition assessment data computed \$65.6M in capital renewal needs. The funding will make significant investments to stabilize the buildings' deterioration rates and address capital renewal needs.

- \$15M state appropriations request
- Eliminates \$28.8M in deferred maintenance
  - Demolition eliminates \$8.5M in deferred maintenance.
  - Renovation corrects \$20M in deferred maintenance to building exteriors, hard-surfaces, vertical lift systems, and electrical/IT systems.

Requested funds will be used to:

- \$5M to complete the replacement of its deteriorated flight operations apron. The first phase of replacing the flight operations apron was funded in 2015 and completed in 2016.
- \$5M to complete building envelope repairs to stop excessive water infiltration issues and eliminate indoor air quality risks associated with the water infiltration. In 2010, UND completed similar work to Odegard Hall for \$2.9M.
- \$5M to complete compliance with TSA regulations and Life-Safety-Security related work. TSA compliance work will focus on the replacement of exterior doors, electronic door access control, and security (cameras, lighting, monitoring). Additional Life-Safety work will address the building's vertical lift systems and fire-systems.
- Design would start in 2021. Construction would start in 2021 and be completed by the start of the fall 2023 semester.

# 9. Discuss agency collections that are deposited in the general fund or a special fund, and any anticipated changes from 2019 legislative session estimates during the 2019-21 biennium and estimated changes for the 2021-23 biennium.

NDUS does not deposit tuition dollars into the general fund.

# 10. Discuss the need for any other sections that are included or are requested/recommended to be included in the agency appropriation bill.

Permission to refinance the Tech Accelerator pending approval by the SBHE.

Support, pending approval by the SBHE, issuance of certificates of participation to raise funds for the Student Housing P3 project. (See Appendix C for detailed information)

Permission to use the Tier 2 and Tier 3 dollars as a source for the Gamble/Nistler CoBPA as part of the State of North Dakota's \$20 million match.

# **11.** Discuss any other bills being considered by the Legislative Assembly and their potential budgetary impact on the agency.

SB2031, SB2032-Funding Formula, SB2033-Capital Building Fund. The University of North Dakota participated in the Interim Higher Education Funding Formula Sub-Committee of the Higher Education Committee and endorses the language and intent contained in these three bills.

HB1275-Legacy Fund Earnings. The NDUS has put forward a proposal to use earnings to fund research and development at the 11 institutions to drive economic diversification for North Dakota.

### 12. Discuss the impact of any budget changes made to meet the Governor's budget guidelines.

Complying with the Governor's budget guidelines will yield a reduction to the non-SMHS portion of UND equal to the loss in support before the 2/2 merit pool of \$10.99 million. During the previous significant biennial reduction in 2017-19, UND saw an overall reduction of \$25.6 million (excluding SMHS), cutting 166 FTE's. Therefore, it is reasonable to assume that it may need to cut about 71 additional FTE's - (10.99 million x 166 / 25.6 million) = 71 FTE's.

Due to tuition revenue concerns related to Covid-19, UND cut its budget by 119 positions. Thus, a reduction caused by the Governor's executive recommendation would be a sequential cut on top of a cut.

Because the FY21 cuts included a reduction in adjunct faculty thereby increasing teaching loads across UND, we will now be faced with cutting vital programs and services as we already utilized the reduction in FY21 of non-tenure track faculty.

13. Provide a one-page itemized listing of the changes your agency is requesting the committee to make to the executive recommendation.

NDUS Institutions Comparison of SBHE		Uni	iver	sity of North	Dako	ta
General and Special Funds Budget						D Requesting
Request to Executive Recommendation						littee to make to
· · ·	SBH	E 2021-23 GF		Executive		executive
	Bud	lget Request	Rec	commendation		ommendation
2019-21 Adjusted General Fund Appropriation	\$	158,139,947	\$	158,139,947	\$	158,139,947
3%/3% Salary Increases		4,006,364		(0.907.702)		4,006,364
Remove one-time, carryover & payroll adj. Base Adjustments		(9,807,792) (1,730,595)		(9,807,792) (1,730,595)		(9,807,792) (1,730,595)
2019-21 Adjusted General Fund Appropriation, Net of Base Adjustments		150,607,924		146,601,560		150,607,924
2021-23 Adjustments:						
2%/2% salary/benefit increase				2,204,905		-
Health insurance increases		-		19,824		-
Funding formula 7.5% reduction		-		(10,995,114)		-
Funding formula - minimum amount payable		-		-		-
Total Adjustments		-		(8,770,385)		-
Total Base General Fund Request & Recommendation	\$	150,607,924	\$	137,831,175	\$	150,607,924
2019-21 Original Other Fund Appropriation	\$	982,020,712	\$	982,020,712	\$	982,020,712
Base Payroll adjustments		-		-		-
Capital Projects		(237,835,035)		(237,835,035)		(237,835,035
Salary Increase in needs based budget request		10,334,621		-		10,334,621
Other changes in estimated income				-		-
Remove prior biennium capital asset carryover		-		-		-
Change in extraordinary repairs and special assessments		-		-		-
Net change om base funding equipment over 5000		-		-		-
2021-23 Adjusted Other Fund Appropriation	\$	754,520,298	\$	744,185,677	\$	754,520,298
Executive Recommendation Base Increases (Decreases	):					
Capital Projects				3,819,375		3,819,375
2%/2% salary/benefit increase				8,216,650		-
Health insurance increases		-		79,786		-
Total Adjustments		-		12,115,811		3,819,375
2021-23 Total Base Special Fund Request and						
Executive Recommendation - Other Funds	\$	754,520,298	\$	756,301,488	\$	758,339,673
Total All funds		756,301,488		894,132,663		908,947,597
	Bond	ling Authority		3,819,375		3,819,375

## 14. Provide a comparison of your agency's optional adjustment requests to those recommended in the executive budget.

State funding of the tuition portion of the salary increase for UND – \$4,350,356

Institution specific Initiatives: 2.5% per credit hour rate increase - Student mental health, new program start-up, workforce initiatives, student services, Title IX implementation & other institution needs – \$5,073,785

Optional Adjustment Request: Merrifield Hall/Twamley Hall renovation-general fund \$56,000,000 and other \$23,000,000 request.

Executive Budget: \$0.00

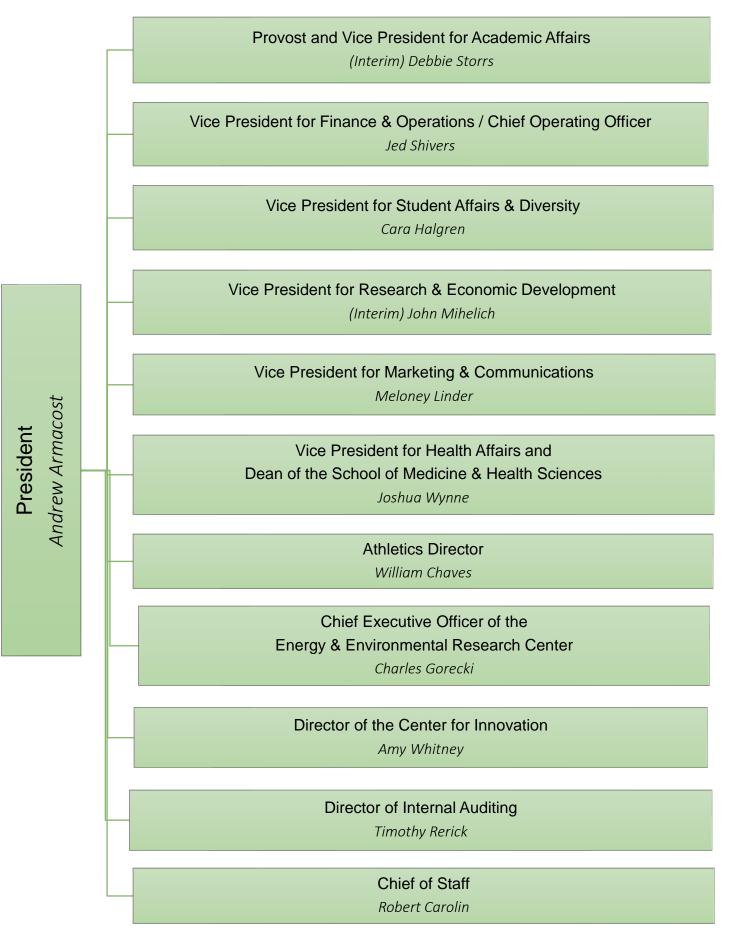
# 15. Identify the amount of federal funding available to your agency relating to the Coronavirus (COVID-19) pandemic, the actual amount spent, and for what purpose.

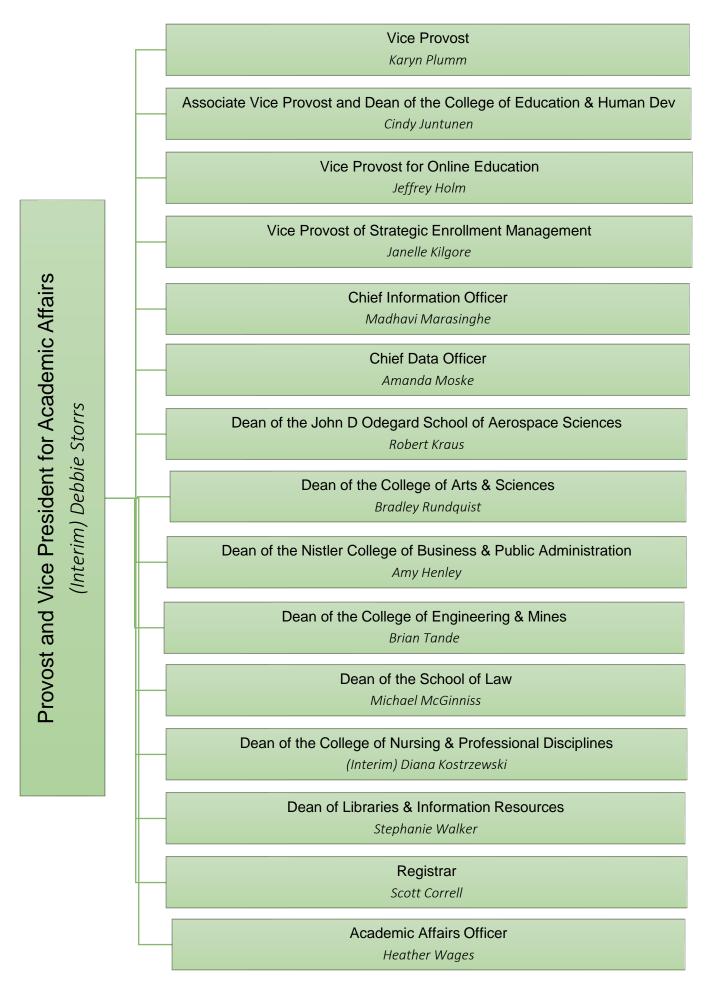
University of North Dakota CARES Funding Budget by OMB Category			
NDUS Approved Category	Requ	ested Revised Budget	 t/Encumbered of 12/18/20
PPE/Thermometers	\$	1,624,557	\$ 1,622,210
Health Services Supplies	\$	342,000	\$ 341,484
Added Cleaning, Supplies, Equipment and Resources	\$	1,140,000	\$ 1,138,876
Technology Needs (Includes Telework Equipment and Software	\$	1,533,000	\$ 1,522,272
Misc. Protective Supplies/Equipment	\$	103,000	\$ 102,743
Classroom & Other Facility Restructuring	\$	22,110	\$ 22,110
Instructional Design Resources	\$	2,290,000	\$ 2,288,900
Academic Technology & Software - Hybrid/Flex Model	\$	5,400,000	\$ 5,395,268
Additional Cleaning Protocols - 2nd round	\$	361,000	\$ 360,374
HVAC and Air Quality Improvements	\$	6,168,000	\$ 6,168,000
Additional Staffing Needs	\$	100,000	\$ 94,074
Costs for Testing	\$	245,000	\$ 240,492
Costs for Quarantine and Isolation	\$	961,000	\$ 960,200
Public Health and Public Safety Staff 100% dedicated to COVID	\$	695,100	\$ 695,100
Total Funding Request		\$20,984,767	\$ 20,952,103

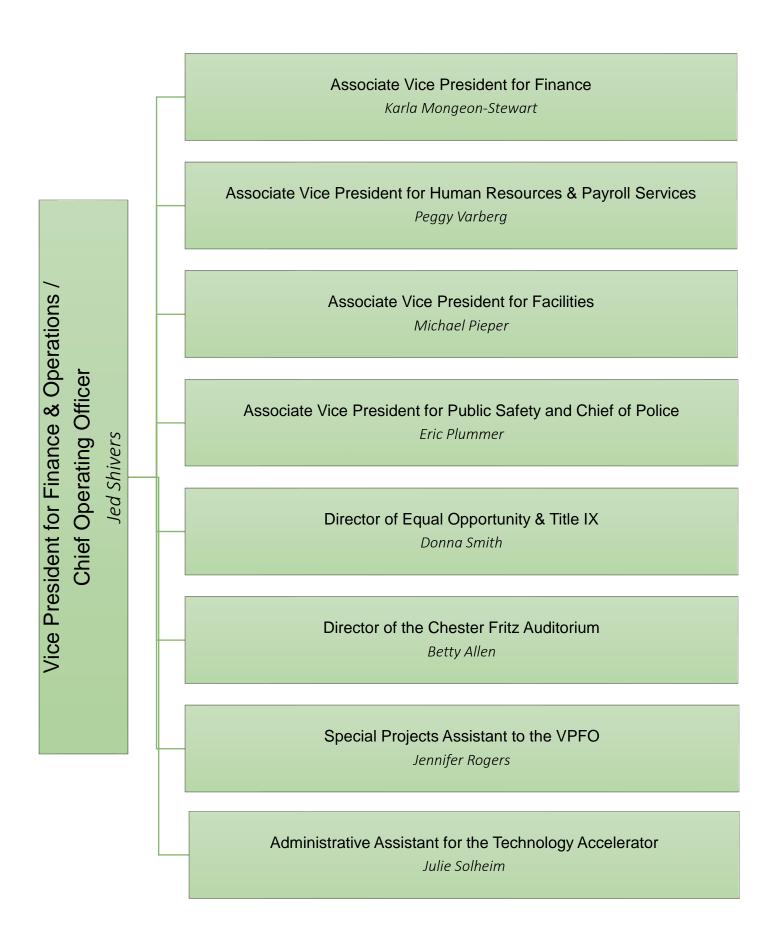
#### **16.** Provide additional information as necessary.

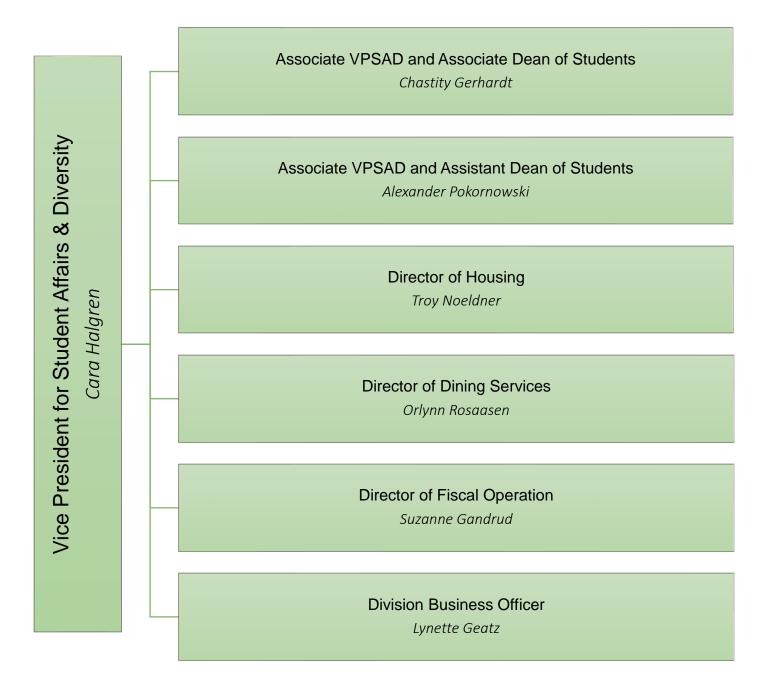
N/A

Appendix A









Executive Director of the Research Institute for Autonomous Systems

Mark Askelson

Executive Director of the Northern Plains UAS Test Site Nicholas Flom

Licensing & Technology Transfer Associate Corporate Engagement & Commercialization *Grant Adkins* 

Research & Sponsored Program Manager Research & Sponsored Program Development *Michael Sadler* 

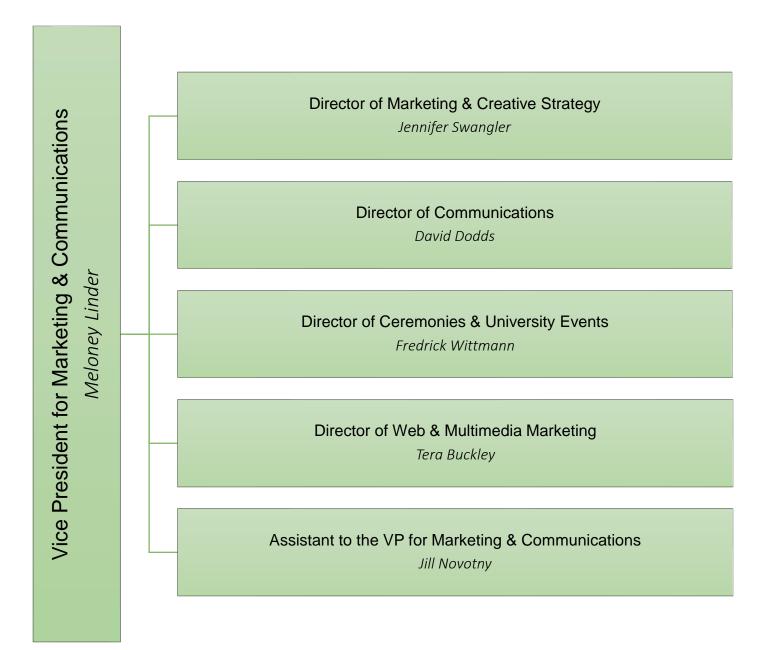
> RCE Manager Research Compliance & Ethics Michelle Bowles

Senior Research Communications Advisor Naomi Hansen

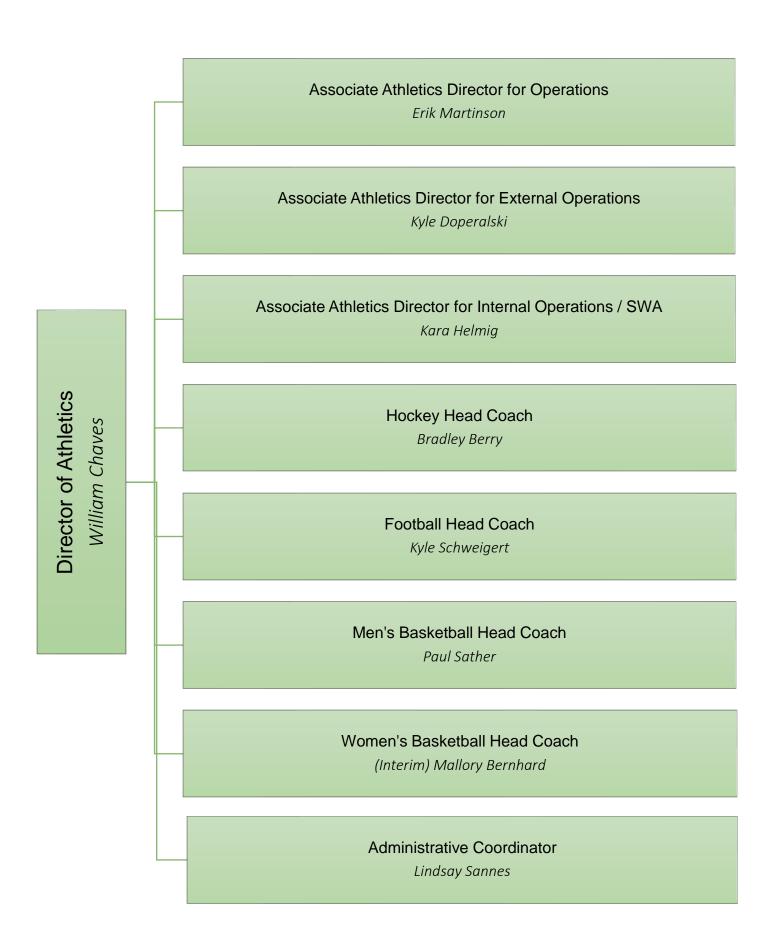
Accounting & Research Data Analyst Trinity Bohlman

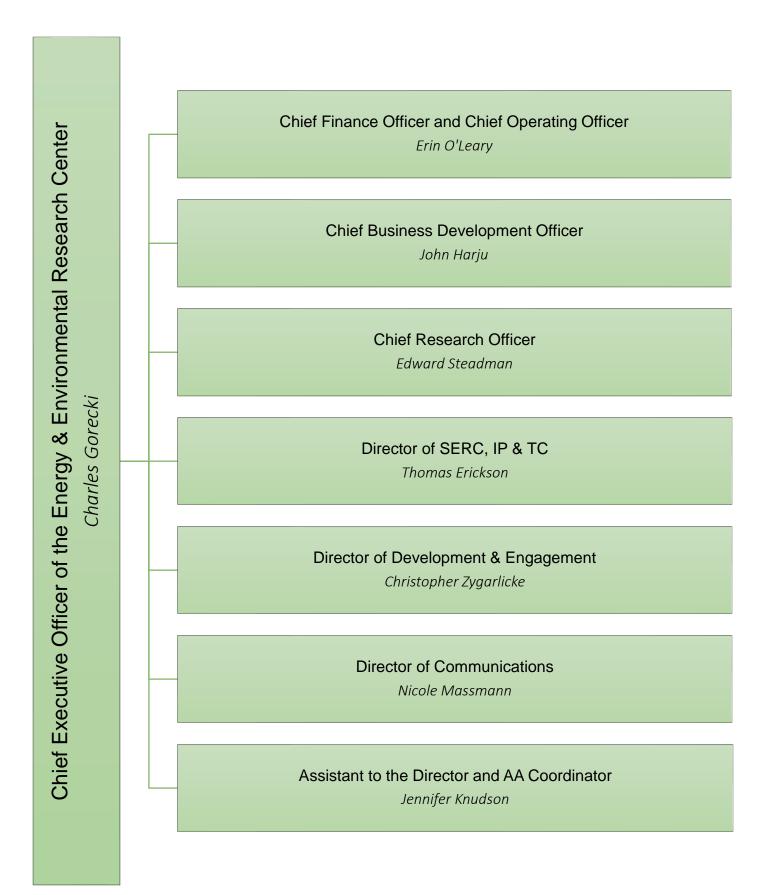
Associate Dean of the School of Graduate Studies Christopher Nelson

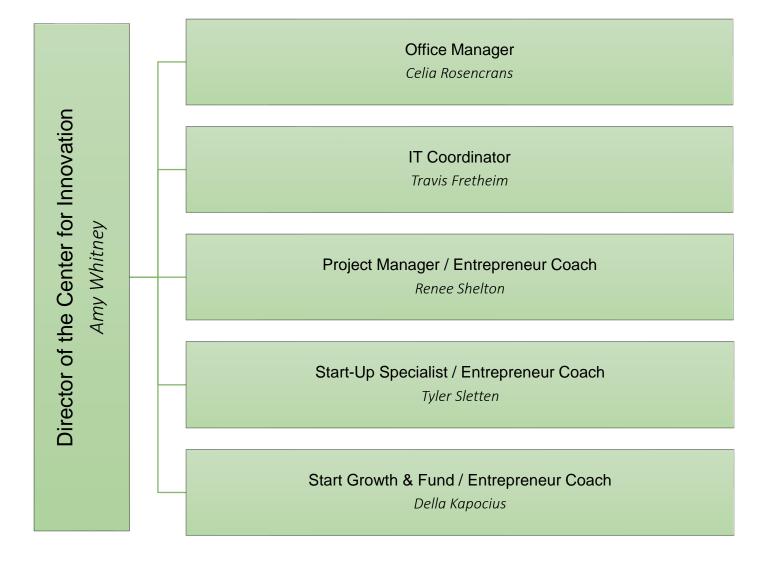
Vice President for Research & Economic Development (Interim) John Mihelich



	Senior Associate Dean for Medicine & Research Marc Basson
	Associate Dean for Health Sciences Thomas Mohr
bciences	Associate Dean for Education & Faculty Affairs Kenneth Ruit
Affairs and & Health S	Associate Dean for Administration & Finance / COO Laura Block
President of Health Affairs and School of Medicine & Health Sciences Joshua Wynne	Director of Indians into Medicine Donald Warne
0 0	Director of Alumni & Community Relations (Interim) Brian Schill
Vic Dean of th	Deputy Director of Rural Health Brad Gibbens
	Professor of Pathology Donald Sens
	Chief of Staff Judy Solberg









Auditor Cynthia Beiswenger



# 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.

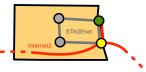
### **Financial Summary**

Item	Ann	ual	Bie	ennium
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 66<sup>th</sup> Legislative Assembly was \$5.7M.

### Internet2

<u>Internet2</u> 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.

# INTRODUCTORY INFORMATION ON A WORK IN PROGRESS: STUDENT HOUSING PUBLIC PRIVATE PARTNERSHIP (P3)

### Successful Replacement of Steam Plant

In 2016, the central steam plant was considered to be in the worst condition of all UND buildings with five of the seven boilers well past their design life, and the other two in immediate need of repairs. The question was not if the plant would fail, but how soon it would fail. UND utilized authority granted by the legislature under N.D.C.C. § 48-02.1 and N.D.C.C. § 54-01-27 to enter into an agreement with a private developer to address the campus's need to replace the steam plant.

By utilizing the P3 model, UND was able to:

- Replace the Steam Plant with no up-front capital cost
- Provide operating and lifecycle cost certainty for the next 40 years
- Address nearly \$100M of deferred maintenance needs in the plant and across campus buildings

The approach allowed UND to accomplish this project with zero capital dollars and no increase in operating costs, with guarantees from the P3 partner on the performance and condition of the plant at the end of the 40-year term. More than 75% of construction spending went to North Dakota businesses and employees. Under this P3 model, UND retains ownership of the steam plant.

### Utilizing P3 to Revitalize Affiliated Student Housing

Beginning in 2018, the University of North Dakota set out to improve the physical condition of its existing campus housing to make the University more competitive and entice students to remain on campus beyond their first year, which helps ensure their academic success. Many of UND's existing residence halls face significant deferred maintenance and are in need of upgrades, including common space, bathrooms, clean air ventilation and air conditioning. In addition, the vast majority of the University's on-campus apartment units have approached the end of their useful life and are more costly to renovate and maintain than to replace.

### **Project Objectives**

- Improve the physical condition of UND Affiliated Housing assets and compete with peers
- Address existing housing deferred maintenance and establish a plan to ensure ongoing capital renewal for the long-term
- Right-size UND's inventory, provide affordable housing, and ensure the success of the UND Dining program
- Design a financially self-sustaining housing facilities program with funding for UND retained services, capital renewal, and reinvestment over 40-year partnership term with Johnson Controls, Plenary, and Corvias (JPC)
- Transfer design, construction, and asset management risk from UND to JPC
- Continue UND management of Student Life to enhance the student experience

UND worked with its P3 consultant, U3 Advisors, and development partner Johnson Controls, Plenary, and Corvias (JPC) to assess a wide variety of scenarios and transaction structures to improve housing. We arrived at a balance that includes significant residence hall renovations in addition to new development that will accommodate student demand for a range of housing units, including apartments. Demand for this program was also vetted through a student housing market study by an independent consultant. The revitalization program also included a significant right-sizing component so that UND would have a more efficient inventory that better aligns supply with demand. The proposed partnership with JPC includes a 76% reduction in 10-year capital needs (a savings of over \$120M) and a 50% reduction in gross square footage, while maintaining a sufficient inventory (2,500 beds) to meet current and projected demand for on-campus housing.

#### Market Study Key Findings

- There is significant incremental (unmet) demand for new on-campus housing options that align with student preferences. Demand exists for an additional 680 on-campus beds.
- Full-time enrollment trends and unit preferences identified in the study support the need for right-sizing and reducing existing inventory while selectively renovating and building new unit types to meet demand.
- UND's room and board costs appear to be a neutral to somewhat important factor in students' decision to ultimately enroll at UND.
- UND's total cost of attendance (tuition, room, board, fees) is comparable to its peer group.

The partnership is designed to result in a financially self-sustaining housing facilities program. The program also provides funding for UND retained services such as Residence Life and ongoing capital renewal and reinvestment over the decades to come, so that deferred maintenance backlogs do not burden future leadership. Additionally, the partnership allows UND to transfer design, construction, and asset management risk to JPC, which will result in cost-efficient construction and long-term operations.

#### **Project Financial Summary**

Funding mechanism: Certificates of Participation

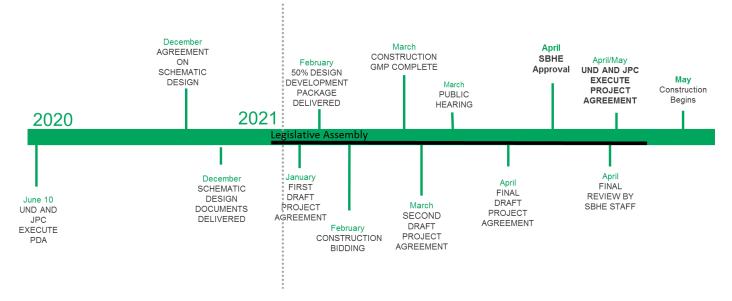
Interest rate & term: 2.92%; 40 years

**Cost:** Construction costs will be approximately \$150M with approximately \$60M in renovation, demolition and hazardous material abatement, \$75M in new construction and nearly \$15M in inflation contingency over the 3-year construction period. Total financed amount including capitalized interest, development fees, finance charges and other costs is estimated to be \$176M (and will not exceed \$199M). Estimated debt service would be \$7.4M per year.

Net cash flow to UND: \$119M over the 40-year term

The State Board of Higher Education gave approval for UND to proceed with the project on 12/17/20. The authorization allows UND to utilize N.D.C.C. § 48-02.1 and N.D.C.C. § 54-01-27 to execute the plan. UND will establish a governance structure with equal representation from UND and JPC to regularly meet and review housing operations and adjust as needed.

#### The deferred maintenance backlog is reduced on a 1:1 basis for every dollar spent on construction.



Under this agreement, UND will retain all student-facing services as well as control of rental rate adjustments, marketing and billing. The development partner will ensure ongoing capital investment to sustain the facilities and will work with UND to evaluate the need for additional development. UND will retain ownership of the facilities under this P3 program.

Below, please find the summary pro-forma for the 45 year term project.

Occupied Beds     2.38       Occupancy %     961       Annual Ret Ex station     2.00       Gross Total Revenue     (10.64.10.19       Bad Debt Expense Ex station     2.00       Symmer Rent Inc come     (10.64.10.19       Application, Damage, and Misc. Fees     28.606.40       Parking Revenue     28.606.40       Retail Revenue     28.606.40       Retail Revenue     28.606.40       Parking Revenue     28.606.40       Retail Revenue     28.606.40       Retail Revenue     28.606.40       Payroll     (127.137.52       Supplies     (14.20.44       Administrative     (14.20.44       Administrative     (26.39.67       Cher Operating Expenses     (26.39.67       Utilities     (13.00.64.32       Taxes and Insurance     (28.79.79       Color Cher Operating Expenses     (28.70.79       Cold Cher Operating Expenses     (28.70.79       Copatial Reapt and Replacement (	Annual Pro Forma Summary - Project Level Only (cash basis)	
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Senior Retained Services (TBD - housekeeping scope inclusion)       (170,128,43         Ground Rent to University       (25,958,00)         Senior Property Management Fee       (25,958,00)         Senior Property Management Fee       (3,238,17)         Total Sr. Operating & Service Expenses       (648,073,91)         Vet Operating Income (NOI)       479,035,49         Vet Operating Income (NOI)       479,035,49         Vet Operating Related Activity       (10,941,12)         Development Fees       (10,941,12)         Costs / Operational Start-up       (3,000,00)         Upforth Credit Rating Fee       (10,941,12)         OP Drawdown       182,352,09         Det Refunding       -         Interest Earned During Construction       1,537,07         CoP Interest Expense (Construction / IO Period)       (11,304,47)         COP Interest Expense (Construction / IO Period)       (11,304,47)         COP Interest Expense (Operations)       (183,596,83)         CoP Interest Expense (Construction / IO Period)       (113,044,47)         COP Interest Expense (Operations)       (133,633,32)         CoP Interest Expense (Operations)       (133,633,32)         CoP Interest Expense (Operations)       (13,644,37)         CoP Interest Expense (Operations)       (133,633,3		
Ground Rent to University       (25.968.00         Capital Repair and Replacement (TBD - SOW for parking resurting)       (25.968.00         Senior Property Management Fee       (37.025.54         Congoing Credit Rating Fee       (3.235.17         Fotal Sr. Operating & Service Expenses       (648,073,91         Vet Operating Income (NOI)       479,035,49         Vet Operating Income (NOI)       479,035,49         Financing Related Activity       (3.00.00         Development Fees       (10.941.12         Closing Costs / Operational Start-up       (150.00         Opfront Credit Rating Fee       (10.02.93         CoDP Drawdown       (162.005,00         Development Fees       (1.002.93         Underwriter's Fees       (1.002.93         Inderwriter's Fees       (1.002.93         Inderwriter's Fees       (1.83.060         COP Interest Expense (Construction / IO Period)       (11.304.47         COP Interest Expense (Construction / IO Period)       (11.304.93.93.93         COP Principal Repayment       (183.056.83         CoP Principal Repayment       (183.056.83         CoP Interest Expense (Operations)       (183.056.83         CoP Principal Repayment       (183.056.83         Cash Flow Available for Other Distributions		
Senior Property Management Fee       (37,025,54         Setail Lease Up Commission       (3,235,17         Congoing Credit Rating Fee       (3,235,17         Fotal Sr. Operating & Service Expenses       (648,073,91         Vet Operating Income (NOI)       479,035,49         Financing Related Activity       (10,941,12         Development Fees       (10,941,12         Closing Costs / Operational Start-up       (3,000,00         Ipfront Credit Rating Fee       (150,000,00         Total Construction Costs       (156,000,00         COP Drawdown       182,352,09         Debt Refunding       1,537,07         Jinderwriter's Fees       (1,002,93         Interest Earned During Construction       1,537,07         CoP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction NOI Debt Payment Account       (183,596,68         Cop Principal Repayment       (183,596,68         Stab Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         fransfers (to)/from DSRA       -         fransfers (to)/from Costruc		-
Retail Lease Up Commission       (3.235,17         Ongoing Credit Rating Fee       (3.235,17         Fotal Sr. Operating & Service Expenses       (648,073,91         Net Operating Income (NOI)       479,035,49         Vet Operating Income (NOI)       479,035,49         Sevelopment Fees       (10.941,12         Closing Costs / Operational Start-up       (3.000,00         Upfront Credit Rating Fee       (150,000         Cob Refunding       182,352,09         Debt Refunding       182,352,09         Debt Refunding       1182,352,09         Debt Refunding       (1,002,93)         Inderwriter's Fees       (1,002,93)         Inderwriter's Fees       (1,002,93)         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction NOI Debt Payment Account       -         Cop Finicipal Repayment       -         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Inc entive Fee       (13.694,37         Cash Flow Available for Residual       <	Capital Repair and Replacement (TBD - SOW for parking resurfing)	(25,958,007)
Dangoing Credit Rating Fee       (3.235,17         Fotal Sr. Operating & Service Expenses       (648,073,91         Net Operating Income (NOI)       479,035,49         Sinancing Related Activity       (10.941,12         Development Fees       (10.941,12         Costs / Operational Start-up       (3.000.00         Upfront Credit Rating Fee       (150,00         CoCP Drawdown       182,352,00         Development Fees       (1.002,93         Underwriter's Fees       (1.002,93         Interest Earned During Construction       1,537,07         CoP Interest Expense (Construction / IO Period)       (11.304,47         COP Interest Expense (Construction / IO Period)       (183,296,96         CoP Interest Expense (Operations)       (183,296,96         CoP Principal Repayment       (183,596,83         CoP Interest Expense (Operations)       (183,596,83         CoP Interest Expense (Operations)       (183,596,83         CoP Principal Repayment       (183,596,83         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94		(37,025,544)
Fotal Sr. Operating & Service Expenses       (648,073,91         Net Operating Income (NOI)       479,035,49         Financing Related Activity       (10,941,12         Development Fees       (10,941,12         Closing Costs / Operational Start-up       (3,000,00         Upfront Credit Rating Fee       (10,941,22         Total Construction Costs       (156,000,00         COP Drawdown       (182,352,09         Det Refunding       -         Jnderwriter's Fees       (1,002,35,00         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Operations)       (183,296,83         COP Interest Expense (Operations)       (183,596,83         CoP Principal Repayment       (183,596,83         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Properly Management Incentive Fee       (13,694,37         Cash Flow Ava		(0.005.470)
Net Operating Income (NOI)       479,035,49         Financing Related Activity       (10.941,12         Development Fees       (10.941,12         Closing Costs / Operational Start-up       (10.941,12         Upfront Credit Rating Fee       (1150,000,000         Total Construction Costs       (156,000,000         COP Drawdown       182,352,090         Debt Refunding       (10.02,93)         Underwriter's Fees       (11,002,93)         Interest Earned During Construction       1.537,077         Cash Flow Post Financing Related Activity       491,830,600         COP Interest Expense (Construction / IO Period)       (11.304,477         COP Interest Expense (Construction / IO Period)       (113,295,966         COP Principal Repayment       (183,596,833,322         Transfers (to)/from DSRA       -         Transfers (to)/from DSRA       -         Transfers (to)/from DSRA       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Inc entive Fee       (13,694,377         Cash Flow Available for Residual       119,938,944	Digoing Creat Rating Fee	(3,235,172)
Financing Related Activity       (10.941,12         Development Fees       (3.000,00         Closing Costs / Operational Start-up       (3.000,00         Upfront Credit Rating Fee       (156,000,00         Total Construction Costs       (156,000,00         COP Drawdown       182,352,09         Debt Refunding       -         Underwriter's Fees       (1,002,93         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11.304,47         COP Interest Expense (Construction / IO Period)       (11.304,47         COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Transfers (to)/from DSRA       -         Transfers (to)/from DSRA       -         Transfers Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Total Sr. Operating & Service Expenses	(648,073,911)
Development Fees       (10.941.12         Closing Costs / Operational Start-up       (3.000,00         Upfront Credit Rating Fee       (150,000         Total Construction Costs       (156,000,00         COP Drawdown       (182,352,09         Debt Refunding       -         Underwriter's Fees       (1,002,93         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,600         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (113,295,96         COP Principal Repayment       (183,296,96         Cosh Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Transfers (to)/from Construction NOI Debt Payment Account       (13,694,37         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94		
Development Fees       (10.941.12         Closing Costs / Operational Start-up       (3.000,00         Upfront Credit Rating Fee       (150,000         Total Construction Costs       (156,000,00         COP Drawdown       (182,352,09         Debt Refunding       -         Underwriter's Fees       (1,002,93         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,600         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (113,295,96         COP Principal Repayment       (183,296,96         Cosh Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Transfers (to)/from Construction NOI Debt Payment Account       (13,694,37         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Net Operating Income (NOI)	479,035,493
Closing Costs / Operational Start-up       (3,000,00         Upfront Credit Rating Fee       (156,000,00         Total Construction Costs       (156,000,00         COP Drawdown       182,352,09         Debt Refunding       -         Underwriter's Fees       (1,002,93         nterest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Construction / IO Period)       (183,596,83         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Net Operating Income (NOI)	479,035,493
Upfront Credit Rating Fee       (150,00)         Total Construction Costs       (156,000,00)         COP Drawdown       182,352,09         Debt Refunding       -         Junderwriter's Fees       (1,002,93)         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Operations)       (183,596,83         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Transfers (to)/from Construction NOI Debt Payment Account       (13,694,37         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94		479,035,493
Total Construction Costs     (156,000,00       COP Drawdown     182,352,09       Didenvriter's Fees     (1,002,93)       Interest Earned During Construction     1,537,07       Cash Flow Post Financing Related Activity     491,830,60       COP Interest Expense (Construction / IO Period)     (11,304,47       COP Interest Expense (Construction / IO Period)     (113,295,96       COP Interest Expense (Operations)     (183,596,83)       COP Principal Repayment     (183,596,83)       Cash Flow Before Transfers to/from Reserves     133,633,32       Fransfers (to)/from DSRA     -       Transfers (to)/from DSRA     -       Interest Received on Cash Deposits / Reserves     -       Subordinated Property Management Incentive Fee     (13,694,37       Cash Flow Available for Residual     119,938,94	inancing Related Activity Development Fees	(10,941,126)
COP Drawdown       182,352,09         Debt Refunding       -         Jinderwriter's Fees       (1,002,93)         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47)         COP Interest Expense (Construction / IO Period)       (11,304,47)         COP Interest Expense (Operations)       (163,295,96)         COP Principal Repayment       (183,596,83)         Cash Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         Fransfers (to)/from DSRA       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37)         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up	(10,941,126) (3,000,000)
Debt Refunding       -         Underwriter's Fees       (1,002,93)         Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         Cash Flow Available for Other Distributions       (13,694,37         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Jpfront Credit Rating Fee	(10,941,126) (3,000,000) (150,000)
Interest Earned During Construction       1,537,07         Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Transfers (to)/from Construction NOI Debt Payment Account       (1         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Jpfront Credit Rating Fee Total Construction Costs	(10,941,126) (3,000,000) (150,000) (156,000,000)
Cash Flow Post Financing Related Activity       491,830,60         COP Interest Expense (Construction / IO Period)       (11,304,47         COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Transfers (to)/from DSRA       -         Transfers (to)/from Construction NOI Debt Payment Account       (1         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Jpfront Credit Rating Fee Total Construction Costs COP Drawdown	(10,941,126) (3,000,000) (150,000)
COP Interest Expense (Construction / IO Period) (11,304,47 (163,295,96 (183,596,83 CoP Principal Repayment (183,596,83 CoP Principal Repayment (183,596,83 Cash Flow Before Transfers to/from Reserves 133,633,32 Fransfers (to)/from DSRA Fransfers (to)/from Construction NOL Debt Payment Account (Cash Flow Available for Other Distributions Interest Received on Cash Deposits / Reserves Subordinated Property Management Incentive Fee (13,694,37 Cash Flow Available for Residual (11,304,47 (163,295,96 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83 (183,596,83	Financing Related Activity Development Fees Closing Costs / Operational Start-up Jpfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding	(10,941,126) (3,000,000) (150,000) (156,000,000)
COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         Fransfers (to)/from Construction NOI Debt Payment Account       (163,295,96         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction	(10,941,126 (3,000,000 (150,000 (156,000,000 182,352,094 (1,002,937 1,537,076
COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         Fransfers (to)/from Construction NOI Debt Payment Account       (163,295,96         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction	(10,941,126) (3,000,000) (150,000) (156,000,000) 182,352,094 (1,002,937) 1,537,076
COP Interest Expense (Operations)       (163,295,96         COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         Fransfers (to)/from Construction NOI Debt Payment Account       (163,295,96         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction	(10,941,126 (3,000,000 (150,000 (156,000,000 182,352,094 (1,002,937 1,537,076
COP Principal Repayment       (183,596,83         Cash Flow Before Transfers to/from Reserves       133,633,32         Fransfers (to)/from DSRA       -         Fransfers (to)/from Construction NOI Debt Payment Account       (183,596,83         Cash Flow Available for Other Distributions       -         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37         Cash Flow Available for Residual       119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity	(10,941,126 (3,000,000) (150,000) (156,000,000) 182,352,094 (1,002,937 1,537,076 <b>491,830,600</b>
fransfers (to)/from DSRA       -         fransfers (to)/from Construction NOI Debt Payment Account       (()         Cash Flow Available for Other Distributions       ()         Interest Received on Cash Deposits / Reserves       -         Subordinated Property Management Incentive Fee       (13,694,37)         Cash Flow Available for Residual       119,938,94	inancing Related Activity Development Fees Closing Costs / Operational Start-up Jpfront Credit Rating Fee Total Construction Costs COP Drawdown Debt Refunding Juderwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity	(10,941,126 (3,000,000 (150,000) (156,000,000) 182,352,094 (1,002,937 1,537,076 <b>491,830,600</b> (11,304,470)
Transfers (to)/from Construction NOI Debt Payment Account (Cash Flow Available for Other Distributions	inancing Related Activity Development Fees Closing Costs / Operational Start-up Jpfront Credit Rating Fee Total Construction Costs COP Drawdown Debt Refunding JInderwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity COP Interest Expense (Construction / IO Period) COP Interest Expense (Operations)	(10,941,126 (3,000,000) (150,000) (156,000,000) 182,352,094 (1,002,937 1,537,076 <b>491,830,600</b> (11,304,470) (163,295,969)
Transfers (to)/from Construction NOI Debt Payment Account (Cash Flow Available for Other Distributions	inancing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Total Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity COP Interest Expense (Construction / IO Period) COP Interest Expense (Operations) COP Principal Repayment	(10,941,126 (3,000,000 (150,000 (156,000,000 182,352,094 (1,002,937 1,537,076 <b>491,830,600</b> (11,304,470 (163,295,969 (183,596,838
Cash Flow Available for Other Distributions Interest Received on Cash Deposits / Reserves Subordinated Property Management Incentive Fee (13,694,37 Cash Flow Available for Residual 119,938,94	inancing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Total Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity COP Interest Expense (Construction / IO Period) COP Interest Expense (Operations) COP Principal Repayment Cash Flow Before Transfers to/from Reserves	(10,941,126 (3,000,000 (150,000) (156,000,000) 182,352,094 (1,002,937 1,537,076 <b>491,830,600</b> (11,304,470) (163,295,969) (183,596,838
Subordinated Property Management Incentive Fee (13,694,37 Cash Flow Available for Residual 119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Total Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity COP Interest Expense (Construction / IO Period) COP Interest Expense (Operations) COP Principal Repayment Cash Flow Before Transfers to/from Reserves Firansfers (to)/from DSRA	(10,941,126) (3,000,000) (150,000) (156,000,000) 182,352,094 (1,002,937) 1,537,076 <b>491,830,600</b> (11,304,470) (163,295,969) (183,596,838) <b>133,633,324</b>
Subordinated Property Management Incentive Fee (13,694,37 Cash Flow Available for Residual 119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity COP Interest Expense (Construction / IO Period) COP Interest Expense (Operations) COP Principal Repayment Cash Flow Before Transfers to/from Reserves Fransfers (to)/from DSRA Fransfers (to)/from Construction NOI Debt Payment Account	(10,941,126) (3,000,000) (150,000) (156,000,000) 182,352,094 (1,002,937) 1,537,076 <b>491,830,600</b> (11,304,470) (163,295,969) (183,596,838) <b>133,633,324</b>
Subordinated Property Management Incentive Fee (13,694,37 Cash Flow Available for Residual 119,938,94	Financing Related Activity Development Fees Closing Costs / Operational Start-up Upfront Credit Rating Fee Fotal Construction Costs COP Drawdown Debt Refunding Underwriter's Fees Interest Earned During Construction Cash Flow Post Financing Related Activity COP Interest Expense (Construction / IO Period) COP Interest Expense (Operations) COP Principal Repayment Cash Flow Before Transfers to/from Reserves Fransfers (to)/from DSRA Fransfers (to)/from Construction NOI Debt Payment Account	(10,941,126) (3,000,000) (150,000) (156,000,000) 182,352,094 (1,002,937) 1,537,076 <b>491,830,600</b> (11,304,470) (163,295,969) (183,596,838) <b>133,633,324</b>
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### **EXECUTIVE SUMMARY**

University of North Dakota ("UND") and Corvias retained MGT Consulting Group to provide a student housing market analysis. The primary goal of the study was to determine the level of demand for upperclassmen and graduate student on-campus beds while also continuing to meet the demand of incoming first-year students<sub>1</sub>, who are required to live in UND Housing.

### PEER INSTITUTION ANALYSIS

UND representatives selected 10 peer institutions. MGT collected most of the data from each institution's website, including the University of North Dakota's information, to provide a third-party perspective similar to that of a potential student. MGT also used consistent resources to determine undergraduate and graduate numbers<sup>2</sup> and capacity.<sup>3</sup> MGT also interviewed five peer institutions to collect in-depth information. They gathered data on unit types and rates, enrollment, tuition and fees, occupancy, meal plan, live-on requirements, and various aspects of renovation and new construction plans. Peer data is in **Appendix 2**.

- Bemidji State University
- MSU Mankato
- MSU Moorhead
- North Dakota State University
- St. Cloud State University
- UM Crookston
- UM Duluth
- UM Twin Cities
- University of Montana
- University of South Dakota

### OFF-CAMPUS MARKET ANALYSIS

MGT gathered data on housing in which students live, based on suggestions from UND Housing Staff administrators. MGT gathered data on rents, unit sizes, policies, amenities, distance from campus, number and age of units, and occupancy. Included in the analysis are 10 conventional complexes and four rental houses. The sample represents 1,563 units; all are located within 5.4 miles of campus with an average distance of 1.92 miles from campus. This information is supplemented by data gathered in the student survey. A summary of the data is in **Appendix 3**.

### STUDENT ENGAGEMENT

MGT and UND designed a web-based survey for students using Qualtrics. The purpose of the survey was to collect students' demographic information, information on students' current housing situation, and information on desired unit types at estimated rents. To notify students, MGT sent an email to students inviting them to respond. The survey was available to students from October 29 – November 12, 2020. As an incentive to respond to the off-campus survey, cash prizes were offered to four randomly selected respondents (totaling \$250). With 1,977 responses from a distribution list of 13,557, the survey achieved a 14.6 percent response rate4. Of the total 1,977 headcount response, 633 respondents lived on campus (including Kappa Delta) and 1,302 lived off-campus (including UND apartments). 22.62 percent of respondents were completing coursework fully online during Fall 2020 and 16.10 percent anticipate continuing coursework fully online in Fall 2021 and beyond. A tabulation of survey responses is in **Appendix 4**. In terms of class level, survey respondents were representative of UND's full enrollment, including graduate students. Females were 62.72 percent of the survey respondents, compared to 48 percent of the full enrollment.

MGT representatives conducted virtual focus groups October 21-22, 2020. The groups were comprised of five different cohorts: first-year residence hall students, graduate and international students, off-campus students, returning and transfer students, and student leaders. Using a moderator's guide that MGT developed with input from the university, the moderators asked questions about students' current housing situation, lifestyle preferences, preferred unit types and amenities, and budget considerations. Each of the 34 participants was provided a \$20 Amazon e-gift card as an honorarium. Results from the initial focus group were used to update sample pricing. Focus group questions are in **Appendix 1**.

### DEMAND ANALYSIS - INCREMENTAL DEMAND

MGT's methodology for incremental demand centers on the off-campus population. The methodology for calculating demand uses the responses to the survey question asking where respondents "would have lived" had their preferred unit type been available for the current academic year. The capture rate for each class level reflects the percentage of respondents of each enrollment status (e.g., freshman) at each level of interest (e.g., definitely interested). A "closure" rate is necessary to reflect that not all students who express interest will sign a lease. MGT assumes a 50 percent closure rate for those who indicated that they "definitely would have lived" in the housing and a 25 percent closure rate for those who indicated that they "might have lived" in the housing (or 50 percent of those with a 50/50 interest). For each class level, off-campus enrollment is multiplied by the capture rate; then the closure rate is applied to yield the demands. This demand is explicitly based on the description of the units that included the rental rates proposed for the housing. On-campus enrollment is not included in the demand calculation for additional capacity due to the fact that on campus students showing interest in on-campus housing would not increase occupancy. Retaining students at a higher than current rate could add to additional capacity in the future. The UND survey analysis indicates demand for 676 additional beds.