

Draft North Dakota State Board of Higher Education

June 28, 2018, Meeting Minutes

The State Board of Higher Education met on Thursday, June 28th at 8:30 a.m. at USDA-ARS-PA Northern Great Plains Research Lab, 1701 10th Ave., SW, Bridge Conference Center, Mandan, ND 58554.

Chair Morton called the meeting to order at 8:30 a.m. CT.

Members participating:

Mr. Don Morton, Chair

Mr. Mike Ness

Dr. Kevin Melicher

Mr. Nick Hacker

Mr. Andy Wakeford, Staff Adviser

Mr. Greg Stemen, Vice Chair

Ms. Kathleen Neset

Dr. Casey Ryan

Mr. Jacob Dailey

Dr. Birgit Pruess, Faculty Adviser

Incoming Board members: Mr. Dan Traynor, Ms. Jill Louters, and Ms. Ashley Thornton

Chancellor present: Dr. Mark Hagerott

Institution Representatives Present:

Dr. Gary Hagen, President, MaSU

Mr. Lloyd Halvorson, Vice President, LRSC

Dr. Jerry Migler, Dean, DCB

Dr. Larry Skogen, President, BSC

Dr. Margaret Dahlberg, Interim President, VCSU

Dr. Tom Mitzel, President, DSU

Dr. Mark Kennedy, President, UND

Dr. John Miller, President, WSC

Dr. Dean Bresciani, President, NDSU

Dr. Steven Shirley, President, MiSU

Dr. John Miller, President, WSC

NDUS Senior Staff Participating:

Mr. Phil Wisecup, Interim Vice Chancellor of Strategic Engagement

Ms. Tammy Dolan, Vice Chancellor of Administrative Affairs

Ms. Lisa Johnson, Interim Vice Chancellor of Academic and Student Affairs

Ms. Kristie Hetzler, Executive Assistant to the State Board of Higher Education

Ms. Karol Riedman, Compliance Officer

Mr. Darin King, Vice Chancellor for Information Technology

Ms. Terry Meyer, Deputy Chief of Staff

Others Participating:

Mr. Nick Vaughn, Attorney General's office

1. **Agenda**

Stemen moved, Ryan seconded, to approve the agenda.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

2. **Meeting Minutes**

Ryan moved, Stemen seconded, to approve the April 26, 2018, meeting minutes.

Ryan, Dailey, Hacker, Melicher, Ness, Stemen, Neset, and Morton voted yes.

3. **Executive Session**

Melicher moved, Ryan seconded, to enter into an executive session to (1) discuss the A. Glenn Hill Center claim by Roers Construction, Inc. and (2) limit the executive session to voting Board members, nonvoting advisors, Board legal counsel, the Executive Assistant to the Board, the Chancellor and selected NDUS Office Staff, the North Dakota State University President, NDSU legal counsel and selected NDSU selected staff.

The legal authority for closing this portion of the meeting is North Dakota Century Code section 15-10-17(1) (a).

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

Executive Session began at 8:35 a.m. CT.

Members participating:

Mr. Don Morton, Chair

Mr. Mike Ness

Dr. Kevin Melicher

Mr. Nick Hacker

Mr. Andy Wakeford, Staff Adviser

Mr. Greg Stemen, Vice Chair

Ms. Kathleen Neset

Dr. Casey Ryan

Mr. Jacob Dailey

Dr. Birgit Pruess, Faculty Adviser

Others Present:

Dr. Mark Hagerott, Chancellor, NDUS

Mr. Phil Wisecup, Interim Vice Chancellor, NDUS

Ms. Tammy Dolan, Vice Chancellor of Administrative Affairs, NDUS

Ms. Lisa Johnson, Interim Vice Chancellor of Academic and Student Affairs, NDUS

Ms. Kristie Hetzler, Executive Assistant to the State Board of Higher Education

Ms. Terry Meyer, Deputy Chief of Staff

Mr. Nick Vaughn, Attorney General's office

President Dean Bresciani, NDSU

Mr. Mike Ellingson, NDSU

Mr. Chris Wilson, NDSU

Mr. Matt Hammer, NDSU

Mr. Bruce Bollinger, NDSU

Mr. Rob Forward, Stinson Leonard Street Law Firm

Melicher moved, Dailey seconded, to adjourn executive session at 9:10 a.m. CT.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

4. **Reconvene**

Ryan moved, Melicher seconded, to authorize NDSU to proceed with mediation as discussed in executive session.

5. **Policy 302.2 Audit committee**

Melicher moved, Ryan seconded, to pass first reading, waive second reading for final adoption of [policy 302.2](#).

Ness, Ryan, Melicher, Dailey, Stemen, Neset, Hacker, and Morton voted yes.

6. **Policy 806.3 Moving Expenses**

Ryan moved, Dailey seconded, to pass first reading, waive second reading for final adoption of [policy 806.3](#).

Ness, Ryan, Melicher, Dailey, Stemen, Neset, Hacker, and Morton voted yes.

7. **MHEC Midwest Student Exchange Program**

Ms. Lisa Johnson explained the benefits of continuing membership in the [Midwestern Higher Education Commission](#).

Ryan moved, Neset seconded, to pursue funding to continue in MHEC.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

8. **Chancellor's Contract**

Chair Morton reviewed input from board members regarding the past year of the Chancellor's performance. Board member Ness expressed concerns and recommended delaying his renewal for six months. Other Board members spoke in favor of renewing Chancellor Hagerott's renewal.

Melicher moved, Dailey seconded, to approve a one-year extension of Chancellor Hagerott's contract to June 30, 2020.

Ness, Ryan, Stemen, Melicher, Dailey, Neset, Hacker, and Morton voted yes.

Note. Board members discussed the importance to pursue the Chancellor's contract be discussed in closed session, like the President's contracts.

9. **Executive session**

Melicher moved, Neset seconded, to enter Executive Session to (1) consider the appointment, Re-appointment, and any new contract terms for Presidents of NDUS institutions and (2) limit the executive session to voting board members, nonvoting advisors, Chancellor, selected NDUS Office Staff, and board counsel.

The legal authority for closing this portion of the meeting is North Dakota Century Code section 15-10-17(1) (a).

Stemen, Ness, Ryan, Melicher, Dailey Neset, Hacker, and Morton voted yes.

Executive session began at 9:48 a.m. CT.

Members participating:

Mr. Don Morton, Chair

Mr. Mike Ness

Dr. Kevin Melicher

Mr. Nick Hacker

Mr. Andy Wakeford, Staff Adviser

Mr. Greg Stemen, Vice Chair

Ms. Kathleen Neset

Dr. Casey Ryan

Mr. Jacob Dailey

Dr. Birgit Pruess, Faculty Adviser

Others Present:

Dr. Mark Hagerott, Chancellor, NDUS

Mr. Phil Wisecup, Interim Vice Chancellor, NDUS

Ms. Tammy Dolan, Vice Chancellor of Administrative Affairs, NDUS

Ms. Lisa Johnson, Interim Vice Chancellor of Academic and Student Affairs, NDUS

Ms. Kristie Hetzler, Executive Assistant to the State Board of Higher Education

Ms. Terry Meyer, Deputy Chief of Staff

Mr. Nick Vaughn, Attorney General's office

Melicher moved, Neset seconded, to adjourn executive session at 12:05 p.m. CT.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

10. **Reconvene**

Ness moved, Melicher seconded, to approve extending presidential contracts for BSC, DSU, WSC, LRSC, NDSU, and MiSU Presidents until June 30, 2020.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

Ryan moved, Melicher seconded, seconded, to renew UND presidential contract to June 30, 2020, and direct the Chancellor to conduct a mid-year review.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

Hacker moved, Ryan seconded, to table the contract for the NDCSC President until the September Board meeting.

Ness, Ryan, Melicher, Dailey, Stemen, Neset, Hacker, and Morton voted yes.

11. **Proposed 2019-2021 Biennial Budget Requests for:**

a. 2019-2021 NDUS [Biannual Budget](#)

b. System Office, Campuses, Forest Service, and Capital Projects

c. State Board of Agricultural Research and Education ([SBARE](#))

- d. Upper Great Plains Transportation Institute ([UGPTI](#))
- e. Northern Crops Institute ([NCI](#))

Hacker moved, Ryan seconded, to approve the budgets proposals for items a – e.

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

Budget and Finance Consent:

- 12. FY19 [SBHE and NDUSO Annual Budgets](#).
- 13. Recommend authorization for LRSC to [transfer of \\$23,000](#) from operations to capital assets, to fund a portion of the 2:1 matching requirement for 2017-19 extraordinary repairs. LRSC will use these funds to complete miscellaneous building repair projects.
- 14. Recommend authorization for LRSC to [transfer of \\$12,000](#) from operations to capital assets, to purchase a storage shed.
- 15. Recommend authorization for UND to proceed with the [High Performance Center \(HPC\)](#) seating and storage project with estimated construction costs of \$695,000 to be funded by UND Alumni Association and Foundation donations.
- 16. Recommend authorization for UND to proceed with the [repurposing of the J. Lloyd Stone House](#) (to be used as a student engagement center) at an estimated cost of \$4,500,000 to be funded by \$3,000,000 in donations from UND Alumni Association and Foundation and \$1,500,000 in Challenge Grant funding.
- 17. Recommend authorization for UND's resolution presented this day which authorizes UND to proceed with private development of state infrastructure as per NDCC 48-02.1 to acquire a new central heating plant. Further authorize the Chancellor to approve release of this resolution once all legal and financial arrangements have been approved by legal counsel for UND and the Board as well as the Chancellor's Office.
- 18. Recommend authorization for [UND Tuition Model Plan Adjustment](#)
- 19. Recommend authorization for NDSU to proceed with the Research 1, Room 204 [Mechanical Improvements](#) project at an estimated cost of \$350,000 funded from local funds.
- 20. Recommend authorization for NDSU to enter into a [Purchase and Sale Contract](#) with Burlington Northern Santa Fe (BNSF) Railway Company, a Delaware corporation, for land located near the NDSU campus in the amount of \$56,500.

Ryan moved, Stemen seconded, to approve budget and finance items 12 – 20.

Stemen, Melicher, Dailey, Ness, Ryan, Neset, Hacker, and Morton voted yes.

SBHE Academic and Student Affairs (no June meeting occurred)

- 21. [Tenure](#)
- 22. New Program, Stage II NDSU – Graduate Certificate in [Computer Science Education](#), CIP Code 11.0199, via on-campus and distance delivery

Melicher moved, Ness seconded, to approve academic items 21 & 22.

Ryan, Stemen, Melicher, Dailey, Ness, Neset, and Morton voted yes. Hacker absent.

SBHE Governance Committee Report

23. Ms. Neset gave an overview of the results of the SBHE Board Self Evaluation Report

SBHE Audit Committee Consent/Report

24. Fiscal Year 2019 Audit Plan
Melicher moved, Hacker seconded, to approve the [2019 Fiscal year audit plan](#).

Melicher, Dailey, Ness, Ryan, Stemen, Neset, Hacker, and Morton voted yes.

25. Ms. Riedman gave an update on the [Compliance Activity Report](#)

NDUS Foundation Action

26. Appointment of New Trustee
Melicher moved, Stemen seconded, to appoint Julie Traynor as a new trustee of the NDUS Foundation.

Board Reports/Discussion/Updates

27. Appointment of Board Committees
Chair Morton reviewed appointments to the Board Committees.

Chancellor Report

Chancellor Hagerott gave updates on the following:

28. Envision and SB2003
29. Staffing Plans

Other Reports:

30. Mr. Cole Krueger gave an update from the North Dakota Student Association.
31. Dr. Debora Dragseth gave a report on the Community of College Faculty.
32. Ms. Retha Mattern gave a report on the Staff Senate.

Present Recognition Plaques to outgoing Board Members and Nick Vaughn

Chair Morton presented outgoing staff and Board member with a plaque in recognition of their work and dedication.

Assessment of Meeting and Potential Future Agenda Items

Public Comment – There was no public comment.

The meeting adjourned at 2:15 p.m. CT.

Approved September 27, 2018.

**NORTH DAKOTA STATE BOARD OF HIGHER EDUCATION
POLICY MANUAL**

SUBJECT: GOVERNANCE AND ORGANIZATION **EFFECTIVE:** June 17, 2016

Section: 302.2 Audit Committee

1. PURPOSE

~~To assist the State Board of Higher Education (Board) in fulfilling~~The SBHE shall establish an audit committee to fulfill its oversight responsibilities for the financial reporting process, the system of internal control, the audit process, and the NDUSNorth Dakota University System's (NDUS) process for monitoring compliance with laws, policies, regulations and the code of conduct.

2.1 AUTHORITY

The ~~audit committee~~ Audit Committee (Committee) has authority to conduct or authorize investigations into any matters within its scope of responsibility, ~~including. It is empowered to:~~

- a. Appoint, compensate, and oversee the work of any registered public accounting firm employed by the organization;
- b. Resolve any disagreements between management and the auditor regarding financial reporting;
- c. Pre-approve all auditing and non-audit services;
- d. Retain independent counsel and request appointment of legal counsel by the attorney general as a special assistant attorney general, accountants, or others to advise the audit committee or assist in the conduct of an investigation;
- e. Seek any information it requires from employees, ~~(all of~~ whom are directed to cooperate with the committee's requests, ~~)~~ or external parties; ~~and~~
- f. Meet with officers, external auditors, or outside counsel, as necessary.

2. Non-compliance with any of the following, within a timely manner, will result in the ~~a~~Audit ~~c~~Committee recommending to the ~~SBHE Board~~ that the respective institution pay for the services of an audit by an external, independent firm, ~~(selected by the a~~Audit ~~c~~Committee, the ~~chief audit executive~~Director of Audit Services and the ~~c~~Compliance ~~o~~fficer), or increase the amount that is assessed by the NDUS to the institution for audit and compliance functions:

- ~~6-~~
- a. Any requests or requirements of any NDUS internal audit staff;
- b. Any requests or requirements of the ~~s~~State ~~a~~Auditor's ~~o~~ffice; ~~or~~
- c. ~~-~~Documented implementation plans.

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3. COMPOSITION

3. The committee shall will consist of three voting members of the SBHE and the Chancellor shall serve, ex officio, as a non-voting member of the committee Board. Each committee member shall be both independent and financially literate. The SBHE Board president will appoint committee members as well as and the committee chair by June 30th of each year to serve one-year terms starting July 1st. The SBHE president and may also appoint additional members to serve, ex officio, SBHE faculty and staff advisors, as ex officio non-voting members of the committee. If a vacancy on the committee occurs before June 30th, the SBHE president shall appoint a voting member of the SBHE to fill the vacancy no later than the next regular meeting of the SBHE after the vacancy occurs. Each committee member will be both independent and financially literate.

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4. MEETINGS

4. The committee will meet at least four times a year, with authority to convene additional meetings, as circumstances require. All committee members are expected to attend each meeting, in person or via teleconference or video conference. The committee will invite members of management, auditors or others to attend meetings and provide pertinent information, as necessary. It may hold executive sessions in compliance with law. In compliance with law, meeting agendas will be prepared, and provided in advance to members, along with appropriate briefing materials. In compliance with law, minutes will be prepared. shall set a meeting schedule for the year at the committee's first meeting after July 1st. Meetings shall comply with all applicable laws, including the necessary posting of notice, the preparation of agendas in advance of meetings, and the recording of minutes for each meeting.

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5. RESPONSIBILITIES

5. The committee will carry out the following responsibilities:

- a. Financial sStatements:
 - i. Review significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas, and recent professional and regulatory pronouncements, and understand their impact on the financial statements.
 - ii. Review with management and the external auditors the results of anthe audit, including any difficulties encountered.
 - iii. Review the annual financial statements, and consider whether they are complete, consistent with information known to committee members, and reflect appropriate accounting principles.

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- iv. Review other sections of the annual report and related regulatory filings before release and consider the accuracy and completeness of the information.
- v. Review with management and the external auditors all matters required to be communicated to the committee under generally accepted auditing standards.
- vi. Understand how management develops interim financial information, and the nature and extent of internal and external auditor involvement.
- vii. Review interim financial reports with management and the external auditors and consider whether they are complete and consistent with the information known to committee members.

b. Internal Control:

- i. Consider the effectiveness of the NDUS university system's internal control system, including information technology security and control.
- ii. Understand the scope of internal and external auditors' review of internal control over financial reporting, and obtain reports on significant findings and recommendations, together with management's responses.

c. Organization:

- i. The NDUS chief audit executive ~~Director of Audit Services (executive Director)~~, and the ~~c~~Compliance ~~o~~Officer (~~o~~Officer), report functionally to the committee and administratively to the NDUS ~~c~~Chief of ~~s~~Staff or equivalent.
- ii. The committee will ensure that there are no unjustified restrictions or limitations and review and concur in the appointment, replacement or dismissal of the ~~executive Director~~ or the ~~o~~Officer.
- iii. Obtain regular updates from the ~~executive Director~~ and the ~~o~~Officer, management, the ~~SBHE Board~~ and the ~~a~~Attorney ~~g~~General regarding relevant matters.
- iv. Review with the ~~executive Director~~ or the ~~o~~Officer the internal audit or compliance; budget, resource plans, activities and organizational structure.
- v. At least once per year, review the performance of the ~~executive Director~~ and the ~~o~~Officer and recommend the annual compensation and salary adjustment.

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d. Internal Audit:

- i. Approve an internal audit charter.
- ii. Approve the annual audit plan and all major changes to the plan. Review the internal audit activity's performance relative to its plan.
- iii.

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- iii. Review the effectiveness of the internal audit function, including conformance with [the following publications of the institute of internal auditors: The Institute of Internal Auditors' the dDefinition of iInternal aAuditing, cCode of eEthics, and the iInternational sStandards for pProfessional pPractice of iInternal aAuditing.](#)
- e. External [aAudit](#):
- i. Review the external auditors' proposed audit scope and approach, including coordination of audit effort with internal audit.
 - ii. Review the performance of the external auditors.
 - iii. ~~MO~~[n an 'as needed' basis, meet](#) with the external auditors to discuss relevant matters, [as needed](#).
- f. Compliance:
- i. Review the effectiveness of the system for monitoring compliance with laws and regulations and the results of the [oOfficer's](#) or management's investigation and follow-up ~~(including disciplinary action)~~ of any instances of noncompliance, [including review of disciplinary action](#).
 - ii. Review the findings of any examinations by the [oOfficer](#), regulatory agencies, and any auditor observations.
 - iii. Review the process for communicating the code of conduct to [SBHEBoard](#) members and [NDUSuniversity system](#) personnel, and for monitoring compliance therewith.
- ~~g.~~ [g.](#) Reporting [rResponsibilities](#):
- i. Regularly report to the [SBHE Board](#) about committee activities, issues, and related recommendations.
 - ii. Provide an open avenue of communication between internal audit, the external auditors, and the [SBHEBoard](#).
 - iii. Review any other reports the [company](#) issues that relate to committee responsibilities.
- h. Other [rResponsibilities](#):
- i. Perform other activities related to this policy as requested by the [SBHEBoard](#).
 - ii. Institute and oversee special investigations as needed. [Efforts should be made to keep the SBHE informed of such special investigations within the confines of open meetings laws.](#)

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- iii. Review and assess the adequacy of the committee policy annually, requesting [SBHE Board](#) approval for proposed changes, and ensure appropriate disclosure as may be required by law, policy or regulation.
- iv. Confirm annually that all responsibilities outlined in this policy have been carried out.
- v. Evaluate the committee's and individual members' performance on a regular basis.

HISTORY: ~~—~~ New Policy, SBHE [mMinutes](#), February 27, 2014; ~~—~~
~~—~~ Amended ~~—~~ SBHE [mMinutes](#), June 17, 2016.

**Summary of Proposed Action
ND State Board of Higher Education
Meeting – June 28, 2018**

1. **Issue:** Revise SBHE Policy 806.3-Moving Expenses for changes in the 2018 Tax Reform Law
2. **Proposed actions:** Approve changes to [policy 806.3](#), effective immediately following approval
3. **Background information:** Prior to the passage of the 2018 Tax Cuts and Jobs Act, moving expense payments made by an institution to or on behalf of an employee could be taxable or non-taxable income to the employee, depending on whether specific criteria were met. The 2018 Tax Reform Law removed the criteria and made all moving expense payments taxable to the employee.

The new policy, if approved, will be implemented effective immediately.

4. **Financial implications:** None
5. **Legal/policy issues:** Compliance with federal laws.
6. **Academic issues:** None
7. **Coordination:** NDUS Senior Staff, Administrative Affairs Councils
8. **Attachments:** None
9. **Contact information:** Robin Putnam, Director of Financial Reporting, robin.putnam@ndus.edu, 328-4114.
10. **Chancellor's Cabinet recommendation:** Approve

NORTH DAKOTA STATE BOARD OF HIGHER EDUCATION
POLICY MANUAL

SUBJECT: FINANCIAL AFFAIRS

EFFECTIVE: May 14, 2015

Section: 806.3 Moving Expenses

1. Upon approval of the president or designee(s), an institution may, ~~subject to the limits of this policy,~~ pay the moving expenses of a benefited employee ~~hired from outside the institution, subject to definitions as defined in SBHE Policy 703.2, hired from outside the institution by using the following one of the methods below. A signed agreement between the institution and the employee should specify the method or methods to be used and amounts to be paid. All three methods are taxable income to the employee and will be included on the employee's W-2 form.~~

~~1. At their discretion, institutions may elect as a matter of practice to adopt one of the options or a combination of the options listed below:~~

~~a. Paying a lump-sum payment to the employee through payroll based on the amount stated in the signed agreement. —Applicable income taxes will be withheld at the time of payment; Negotiating an amount paid to the employee through payroll as a lump sum for relocation expenses. Such allowance will be reported as taxable income and included on the employee's W-2. The moving allowance will be subject to all tax liabilities at the time of payment; OR~~

~~b. Compensating the employee for moving expenses through accounts payable. A signed agreement, invoices or receipts must be provided before payment is made; or~~

~~a.c. Paying a vendor directly through accounts payable for moving expenses as previously authorized in the signed agreement.~~

~~b. Using a combination of reimbursing the employee for actual moving expenses and paying the vendor(s) directly. Actual moving expenses include direct travel to and from the new work location, and while in temporary living quarters for the employee and immediate family (not to exceed 10 days total). Meals and mileage expenses will be reimbursed at the per diem and mileage rates established for employee travel reimbursement. Lodging expenses will be reimbursed at the actual cost of the lodging. Transportation expenses for personal items and household goods may be reimbursed at the actual expenses incurred. Additionally, personal travel expenses may also be reimbursed for one round trip to the new work location for the employee and employee's spouse/partner for up to three days to arrange for living accommodations. It is the responsibility of the employee to provide sufficient documentation to justify the reimbursement; the institution may deny any claim for reimbursement that is not sufficiently documented. Institutions will need to refer to IRS rules and regulations~~

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regarding taxability of the expenses in part b.

(Institutions may use either method (a and b, above) but must choose one or the other when paying each individual employee.)

A signed written agreement between the institution and the employee should specify the method or methods to be used and amounts to be paid. All three methods are taxable income to the employee and will be included on the employee's W-2 form.

2.2 Relocation expenses being paid or compensated reimbursed should not exceed one month's salary or an defined maximum "not to exceed" amount approved by the president or designee(s), and the amount should be documented in the employment contract signed agreement and reimbursement should not exceed that amount.

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Employees transferring within the same institution.

2.3 The moving expenses of employees transferring to a new work location within the same institution shall be governed by N.D.C.C. § 44-08-04.3.

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REFERENCE: N.D.C.C. § 44-08-04.3; SBHE Policy 703.2

HISTORY: Replaces Article II, Section 2(H), 4-5; New policy, SBHE mMinutes, November 3-5, 1982; page 5091.
Amendment, SBHE mMinutes, June 20-21, 1991, page 6143.
Amendment, SBHE mMinutes, May 19, 1994, page 6361.
Amendment, SBHE mMinutes, April 4, 2000.
Amendment, SBHE mMinutes, May 14, 2015.

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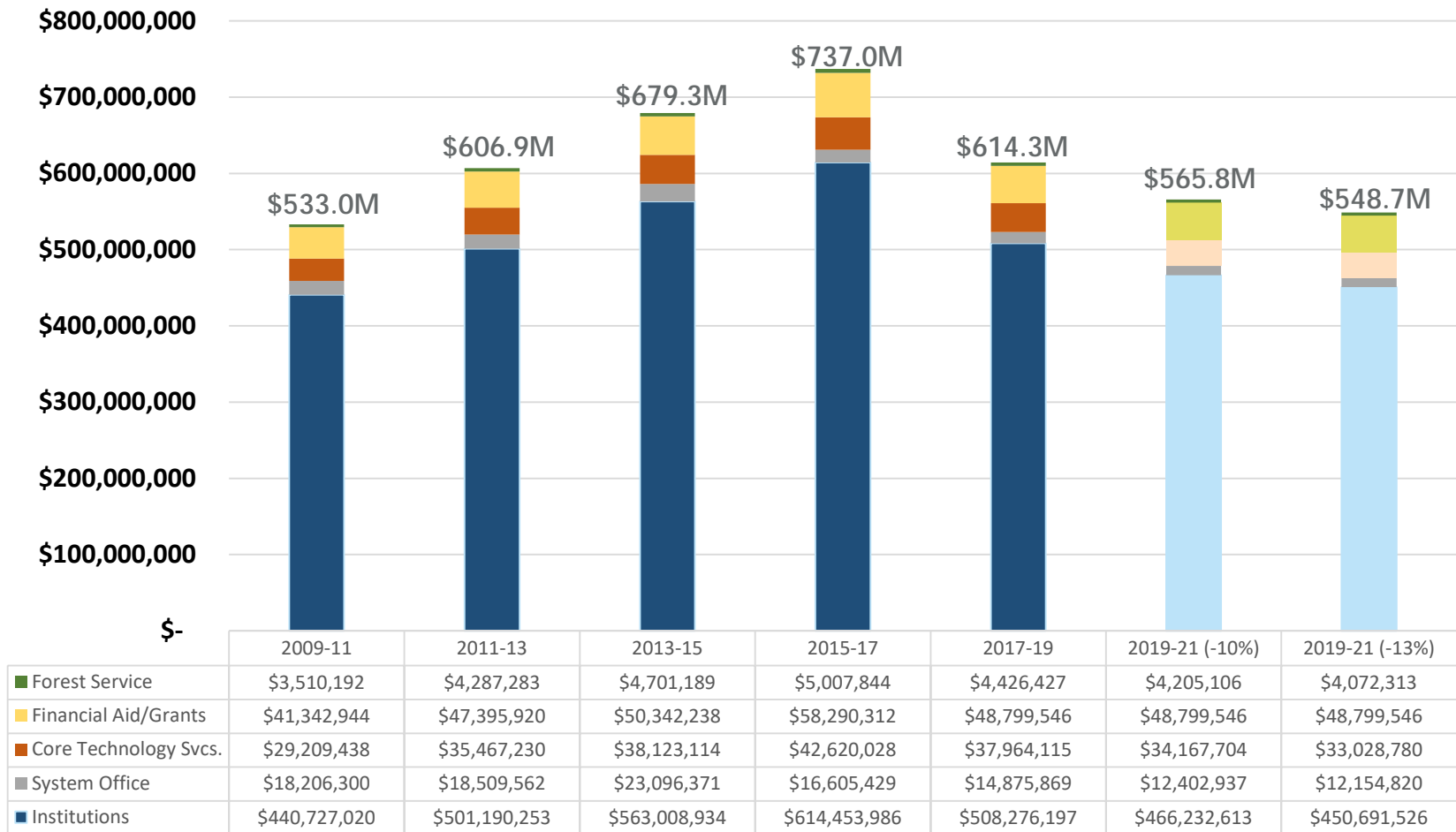
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Summary of Proposed Action State Board of Higher Education Meeting – June 28, 2018

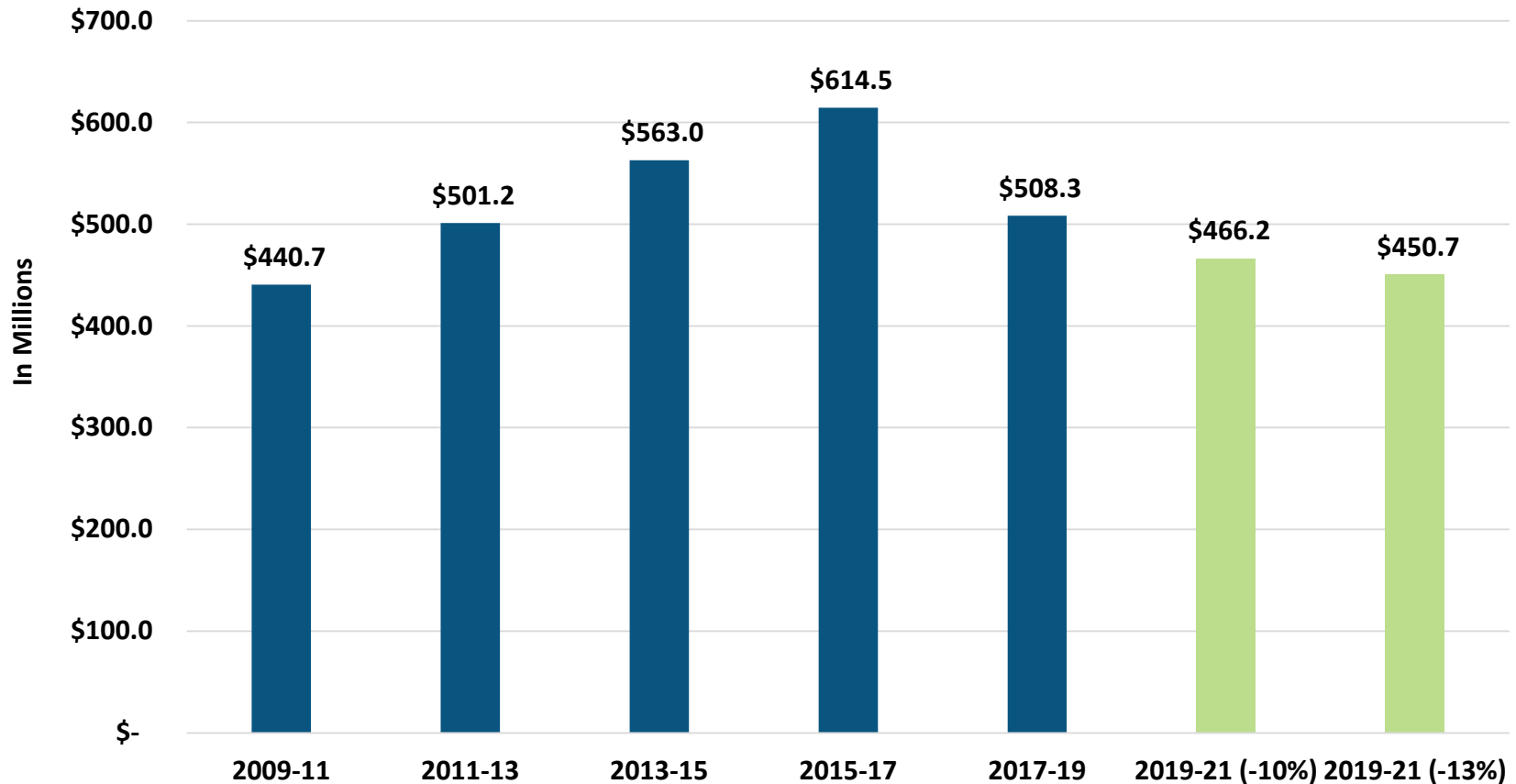
- 1. Issue:** Seeking SBHE support to contact the Midwestern Higher Education Compact (MHEC) for a waiver to extend the current MHEC/Midwest Student Exchange Program (MSEP) agreement through June 30, 2020.
- 2. Proposed actions:** SBHE approval to draft a memo extending the existing MHEC agreement to permit NDUS institutions to enroll students in the MSEP for the period of July 1, 2019 through June 30, 2020.
- 3. Background information:** North Dakota has been a statutory member of the MHEC since 1999. All of MHEC's programs and services have been available to North Dakota entities and citizens since that time. The 2017 legislature repealed the MHEC statute effective June 30, 2019. This means that ND entities and citizens cannot participate in MHEC services after that date. The MHEC service that will impact North Dakota citizens and North Dakota University System (NDUS) institutions at this time is the Midwest Student Exchange Program (MSEP). Currently, 1,607 students from other MHEC states attend NDUS institutions through MSEP and 71 North Dakota residents enroll in other MHEC state institutions through MSEP.
- 4. Financial implications:** Currently, 1,607 students from other MHEC states attend NDUS institutions through MSEP and 71 North Dakota residents enroll in other MHEC state institutions through MSEP.
- 5. Legal/policy issues:** MHEC bylaws state: *"For the 12 states identified in Article VI of the MHEC compact statute, the MHEC compact statute must remain in effect in order for those states to participate in MHEC programs and services"*. North Dakota is one of the 12 states identified in this statute. This means that since North Dakota will no longer be a member of MHEC after June 30, 2019 North Dakota institutions cannot offer and enroll new students under MSEP after June 30, 2019, and North Dakota residents (new students) will no longer be able to enroll at institutions in other states through MSEP, unless the 2019 legislature enacts legislation and the governor signs it to maintain North Dakota's participation in MHEC after June 30, 2019. Institutions will be making offers and admitting students at this time for enrollment after June 30, 2019.
- 6. Contact information:** Lisa A. Johnson, Interim Vice Chancellor for Academic and Student Affairs

NDUS State General Fund Appropriations (Ongoing)



NDUS Institutions' State General Fund Appropriations (Ongoing)

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2019-21 NDUS Budget Request Comparison (Ongoing Funds Only)

North Dakota University System 2019-21 Needs-Based Budget <i>In Millions</i>				
	General Fund	Tuition	Other Funds	Total
2017-19 Base	\$ 614.4	\$ 625.2	\$ 1,227.3	\$ 2,466.9
Formula Production	\$ 9.8	\$ -	\$ -	\$ 9.8
Bond Payments	\$ (1.7)			\$ (1.7)
Salary Increase 4%/4%	\$ 22.7	\$ 19.9	\$ 20.3	\$ 62.9
2019-21 Need-Based Budget	\$ 645.2	\$ 645.1	\$ 1,247.6	\$ 2,537.9
\$ Change	\$ 30.8	\$ 19.9	\$ 20.3	\$ 71.0
% Change	5.0%	3.2%	1.7%	2.9%

North Dakota University System 2019-21 Budget Guidelines <i>In Millions</i>				
	General Fund	Tuition	Other Funds	Total
2017-19 Base	\$ 614.4	\$ 625.2	\$ 1,227.3	\$ 2,466.9
Formula Production	\$ 9.8			\$ 9.8
Bond Payments	\$ (1.7)			
10% Base Reduction	\$ (56.6)	\$ 51.8		\$ (4.8)
2019-21 Budget Guidelines	\$ 565.9	\$ 677.0	\$ 1,227.3	\$ 2,471.9
\$ Change	\$ (48.5)	\$ 51.8	\$ -	\$ 5.0
% Change	-7.9%	8.3%	0.0%	0.2%

2019-21 Need-Based Budget

- Unanimously approved by SBHE Budget & Finance Committee on 6/19/2018
- Reflects statutory formula production & bond payment changes
- Includes 4% annual salary increases
- Salary increases require 1.5% - 2.9% annual tuition increase
- Does not restore 2015-17 \$122.7M GF cuts

2019-21 Budget Guidelines

- Not recommended by BFC
- Reflects statutory formula production & bond payment changes
- 10% reductions could mean 300 FTE reductions
- Annual tuition increases of 4% - 13% would offset 10% reduction at institutions

2019-21 Budget Request Comparison

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Institutions

2019-21 Needs-Based Budget				
<i>In Millions</i>				
General Fund	Tuition	Other Funds	Total	
2017-19 Base	\$ 508.3	\$ 625.2	\$ 1,190.1	\$ 2,323.6
Formula Production	\$ 9.8			\$ 9.8
Salary Increase 4%/4%	\$ 21.4	\$ 19.9	\$ 19.9	\$ 61.2
2019-21 Need-Based Budget	\$ 539.5	\$ 645.1	\$ 1,210.0	\$ 2,394.6
\$ Change	\$ 31	\$ 20	\$ 20	\$ 71
% Change	6.1%	3.2%	1.7%	3.1%

2019-21 Budget Guidelines				
<i>In Millions</i>				
General Fund	Tuition	Other Funds	Total	
2017-19 Base	\$ 508.3	\$ 625.2	\$ 1,190.1	\$ 2,323.6
Formula Production	\$ 9.8			\$ 9.8
10% Base Reduction	\$ (51.8)	\$ 51.8		\$ -
2019-21 Budget Guidelines	\$ 466.3	\$ 677.0	\$ 1,190.1	\$ 2,333.4
\$ Change	\$ (42)	\$ 52	\$ -	\$ 10
% Change	-8.3%	8.3%	0.0%	0.4%

System Office

2019-21 Needs-Based Budget			
<i>In Millions</i>			
General Fund	Other Funds	Total	
2017-19 Base	\$ 14.9	\$ 1.9	\$ 16.8
Bond Payments	\$ (1.7)		\$ (1.7)
Salary Increase 4%/4%	\$ 0.3	\$ 0.02	\$ 0.3
2019-21 Need-Based Budget	\$ 13.5	\$ 1.9	\$ 15.4
\$ Change	\$ (1.40)	\$ 0.02	\$ (1.38)
% Change	-9.4%	1.2%	-8.2%

2019-21 Budget Guidelines			
<i>In Millions</i>			
General Fund	Other Funds	Total	
2017-19 Base	\$ 14.9	\$ 1.9	\$ 16.8
Bond Payments	\$ (1.7)		\$ (1.7)
10% Base Reduction	\$ (0.8)		\$ (0.8)
2019-21 Budget Guidelines	\$ 12.4	\$ 1.9	\$ 14.3
\$ Change	\$ (2.50)	\$ -	\$ (2.50)
% Change	-16.8%	0.0%	-14.9%

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2019-21 Budget Request Comparison

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Core Technology Services

	2019-21 Needs-Based Budget		
	<i>In Millions</i>		
	General Fund	Other Funds	Total
2017-19 Base	\$ 38.0	\$ 23.6	\$ 61.6
Salary Increase 4%/4%	\$ 0.8	\$ 0.4	\$ 1.2
2019-21 Need-Based Budget	<u>\$ 38.8</u>	<u>\$ 24.0</u>	<u>\$ 62.8</u>
\$ Change	\$ 0.80	\$ 0.40	\$ 1.20
% Change	2.1%	1.7%	1.9%

	2019-21 Budget Guidelines		
	<i>In Millions</i>		
	General Fund	Other Funds	Total
2017-19 Base	\$ 38.0	\$ 23.6	\$ 61.6
10% Base Reduction	\$ (3.8)		\$ (3.8)
2019-21 Budget Guidelines	<u>\$ 34.2</u>	<u>\$ 23.6</u>	<u>\$ 57.8</u>
\$ Change	\$ (3.80)	\$ -	\$ (3.80)
% Change	-10.0%	0.0%	-6.2%

Financial Aid and System Grants

	2019-21 Needs-Based Budget		
	<i>In Millions</i>		
	General Fund	Other Funds	Total
2017-19 Base	\$ 48.8	\$ 1.0	\$ 49.8
2019-21 Need-Based Budget	<u>\$ 48.8</u>	<u>\$ 1.0</u>	<u>\$ 49.8</u>
\$ Change	\$ -	\$ -	\$ -
% Change	0.0%	0.0%	0.0%

	2019-21 Budget Guidelines		
	<i>In Millions</i>		
	General Fund	Other Funds	Total
2017-19 Base	\$ 48.8	\$ 1.0	\$ 49.8
2019-21 Budget Guidelines	<u>\$ 48.8</u>	<u>\$ 1.0</u>	<u>\$ 49.8</u>
\$ Change	\$ -	\$ -	\$ -
% Change	0.0%	0.0%	0.0%

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2019-21 Budget Request Comparison

Forest Service

	2019-21 Needs-Based Budget		
	<i>In Millions</i>		
	General Fund	Other Funds	Total
2017-19 Base	\$ 4.4	\$ 10.7	\$ 15.1
Salary Increase 4%/4%	\$ 0.20	\$ 0.06	\$ 0.2
2019-21 Need-Based Budget	\$ 4.6	\$ 10.7	\$ 15.3
\$ Change	\$ 0.20	\$ 0.01	\$ 0.21
% Change	4.5%	0.1%	1.4%

	2019-21 Budget Guidelines		
	<i>In Millions</i>		
	General Fund	Other Funds	Total
2017-19 Base	\$ 4.4	\$ 10.7	\$ 15.1
5% Base Reduction	\$ (0.2)		\$ (0.2)
2019-21 Budget Guidelines	\$ 4.2	\$ 10.7	\$ 14.9
\$ Change	\$ (0.20)	\$ -	\$ (0.20)
% Change	-4.5%	0.0%	-1.3%

2019-21 Investment Opportunities - Optional Adjustment Requests

	Base Funding (in Millions)	One-Time Funding (in Millions)
Systemwide Initiatives		
Envision 2030	\$ 1.00	\$ 14.50
SB2003 Task Force	\$ 3.86	\$ 1.25
Campus-Specific Needs		\$ 11.00
Systemwide Technology Initiatives	\$ 6.18	
System Governance	\$ 2.24	
Student Grants	\$ (2.00)	\$ 0.50
	<u>\$ 11.28</u>	<u>\$ 27.25</u>

2019-21 Investment Opportunities

- Unanimously approved by SBHE Budget & Finance Committee on 6/19/2018
- Provides startup and ongoing funding to continue systemwide transformation, streamlining and operations

2019-21 Investment Opportunities - Optional Adjustment Requests

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- Systemwide Initiatives – Envision 2030
 - Campus Workforce Initiative Pool - \$5.0 million
 - \$4.0 million high priority programs & initiatives
 - \$1.0 million scholarships in critical need areas
 - Campus Research Initiative Pool - \$10.0 million
 - Research, Emerging Technologies
 - Digital Transformation - \$500,000
 - Artificial Intelligence & machine learning study; Liberal Arts & STEM
 - Curriculum development stipends

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2019-21 Investment Opportunities - Optional Adjustment Requests

- Systemwide Initiatives
 - SB2003 Task Force
 - Common Enrollment Mgmt System – \$300,000
 - Academic Pathways Initiative - \$300,000
 - College & Career Development Coordinators – 11.0 FTE - \$1.3 million
 - Common Course Catalogue – 1.5 FTE - \$800,000
 - Education/Workforce Dashboard - \$150,000
 - eProcurement System - \$2.2 million
 - Campus Academic, Technology, Infrastructure Needs - \$11.0 million

2019-21 Investment Opportunities - Optional Adjustment Requests

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- Systemwide Technology Initiatives
 - IT Security - 2.00 FTE Operational Security Analysts - \$480,000
 - Digital Initiative – 2017 SB2003 – \$5.7 million
 - Research Network - \$1.7 million
 - High Performance Computing - \$4.0 million

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2019-21 Investment Opportunities - Optional Adjustment Requests

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- System Governance
 - Director of Workforce & Research Development – 1.00 FTE - \$220,000
 - Director of Academic Programs Restoration – 1.00 GTE - \$220,000
 - Replace Student Loan Trust Fund Dollars – Connect ND - \$539,437
 - Eliminate Campus Assessment for Internal Audit & Compliance - \$300,000

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2019-21 Investment Opportunities - Optional Adjustment Requests

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- Student Scholarships & Grants
 - Replace Student Loan Trust Fund Dollars – PSEP & Tribal College Grants - \$965,307
 - Financial Aid System Replacement - \$600,000
 - Transfer Teacher Shortage Loan Forgiveness Program to DPI – (\$2.1 million)

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2019-21 Investment Opportunities - Capital Project Requests

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- All address life/safety, deferred maintenance and program enrollment driven needs
- \$409.2 million general fund campus requests
- \$230.8 million non-general fund campus requests
- **Chancellor recommendation for submission to Governor:**
 - 10 highest ranked general fund projects - \$97.2 million
 - All non-general fund projects - \$230.8 million
 - Projects address \$107.1 million deferred maintenance

**See separate document for additional details*

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2019-21 NDUS Budget Request

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2019-21 Ongoing Budget Request <i>In Millions</i>				
	General Fund	Tuition	Other Funds	Total
2017-19 Base	\$ 508.3	\$ 625.2	\$ 1,190.1	\$ 2,323.6
Formula Production	\$ 9.8			\$ 9.8
Salary Increase 4%/4%	\$ 21.4	\$ 19.9	\$ 19.9	\$ 61.2
2019-21 Needs-Based Budget	\$ 539.5	\$ 645.1	\$ 1,210.0	\$ 2,394.6
Optional Investment Opportunities	\$ 11.3			\$ 11.3
2019-21 Ongoing Budget Request	\$ 550.8	\$ 645.1	\$ 1,210.0	\$ 2,405.9
<i>\$ Change</i>	\$ 42	\$ 20	\$ 20	\$ 82
<i>% Change</i>	8.4%	3.2%	1.7%	3.5%

2019-21 One-Time Budget Request <i>In Millions</i>			
	General Fund	Other Funds	Total
Optional Investment Opportunities	\$ 27.3		\$ 27.3
Capital Projects	\$ 97.2	\$ 230.8	\$ 328.0
2019-21 Ongoing Budget Request	\$ 124.5	\$ 230.8	\$ 355.3

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2019-2021 Budget Request

NDSU North Dakota Forest Service

May 31, 2018

2019-2021 Budget Request

General Funds	\$ 4,426,427
Estimated Income	<u>\$10,650,748</u>
Total	\$15,077,175

Agency Information:

North Dakota Forest Service
 Larry A. Kotchman, State Forester
 307 First Street East, Bottineau, ND 58318
 Telephone: (701) 228-5422
 Email: Larry.Kotchman@ndsu.edu

1. **Name and Description of Budget Request: Sustainable Forestry Programs**

The Forest Service requests approval to submit a needs based 2019-2021 budget for Sustainable Forestry Programs. The total request is \$15,077,175 including \$14,958,447 for Operations and \$118,728 for Capital Assets. The General Fund request is \$4,426,427, equivalent to the 2017-2019 adjusted base. Estimated income will be \$10,650,748. The general fund appropriation supports salaries, fringes and operating expenses for 27.0 FTE and 45 seasonal positions that provide public forestry services. This investment combined with the collaborative efforts of the Forest Service's dedicated staff leverages over \$7.8 million in external grants and contracts for voluntary, educational and incentives based forestry programs to address natural resource issues and customer needs identified in the North Dakota Forest Action Plan. The Capital Assets request funds extraordinary repairs and equipment for the Towner State Nursery and field offices at Bottineau, Lisbon and Walhalla. The agency has 41 office, shop and storage buildings valued at \$3,975,252. Infrastructure associated with these facilities is valued at \$3,487,289.

Forest Service Budget Request Focuses on Implementation of North Dakota's Forest Action Plan

The Forest Service 2019-2021 budget will conserve, protect and enhance priority forest landscapes identified in the *North Dakota Forest Action Plan*. The plan ensures the care and protection of upland forests, riparian (streamside) forests, rural plantings and community forests by sustaining the agency's emphasis on providing financial, technical and educational assistance to communities, rural landowners, rural fire districts, soil conservation districts, schools and citizens of North Dakota. The Forest Service 2019-2021 budget supports seven forestry programs each aimed specifically to address critical issues and service needs identified in North Dakota's Forest Action Plan. Established by the Food, Conservation and Energy Act of 2008 (Farm Bill), the plan provides a comprehensive analysis of forest-related conditions, trends, threats and forestry opportunities in North Dakota. The development of the plan was driven by input and collaboration from stakeholders, partners, and customers to identify needs and priorities. Long-term strategies focus financial, technical and educational resources on important landscape areas with the greatest opportunity to ensure the protection of trees and forests for North Dakotans. The strategies provide the basis for future program, agency and partner coordination including: a) conserving and managing working forests landscapes for multiple values and uses; b) protecting forests from threats including catastrophic wildfires, storms, flooding, insect and disease outbreaks and invasive species; and c) enhancing benefits from trees and forests including air and water quality, soil conservation, wildlife and fish habitat, biological diversity, carbon storage, forest products, forestry related jobs, and production of renewable energy. Trees and forests provide important public environmental benefits to the citizens of North Dakota. Rural tree plantings reduce soil erosion during years of drought, provide critical wildlife habitat, increase crop yields, stabilize streambanks, filter water runoff from adjacent agricultural lands, protect stretches of highway prone to severe snow accumulation, provide wind protection for livestock, and protect farmsteads and rural homes from snow and wind. Community forests benefit the community's residents by reducing winter heating and summer cooling costs, providing wind and snow protection, managing stormwater runoff, providing recreational opportunities and enhancing the quality of life. Native forests comprise over 850,000 acres across the state and provide wildlife habitat, enhance recreational opportunities, stabilize

river banks, filter water runoff from adjacent agricultural lands, provide wood products, serve as seed sources for conservation tree production, and increase the botanical diversity of the state.

Forest Service Budget Request Supports Governor's Main Street Initiative

Forestry programs support the Governor's Main Street Initiative by contributing to the health, safety and economy of North Dakota. The 2019-2021 budget request sustains the agency's capacity to provide essential public services including:

- 1) Community Forestry assistance for tree planting and forestry development projects in North Dakota's 357 cities and towns benefiting 90 percent of the state's residents.
- 2) Fire Management for the protection of lives, property and natural resources through training, organizing and equipping North Dakota's 378 rural volunteer fire departments. An average of 440 human caused wildfires burn over 30,000 acres each year.
- 3) Forest Health protection including insect and disease surveys and training to minimize the threat of invasive species like emerald ash borer. North Dakota has 78 million ash trees threatened by emerald ash borer. The pest has now been confirmed in Manitoba, Minnesota and South Dakota.
- 4) Forest Stewardship assistance for rural landowners to manage, protect and utilize their native and planted forest resources. ND Outdoor Heritage Fund Windbreak Renovation Initiative projects are underway with 220 landowners renovating declining field and farmstead windbreaks.
- 5) Information and Education outreach to teachers and K-12 students to make wise decisions about the conservation of trees and forests;
- 6) Towner State Nursery for the annual production of 1 million conservation tree seedlings distributed to landowners for field and farmstead windbreaks, living snow fences, wildlife and conservation plantings.
- 7) State Forests to provide wildlife habitat, clean air and water, recreational opportunities and forest products. The Forest Service owns five state forests comprising 13,290 acres that play an important role in the economic well-being of several rural communities by attracting hunters, hikers, campers, skiers, snowmobilers, tourists and other outdoor enthusiasts.

2. 2019-2021 Optional Change - General Fund Budget Reduction (5%) - \$221,321

The Office of Management and Budget indicates the Forest Service's general fund request limit for the 2019-2021 biennium is \$4,205,106. This amount includes a five percent decrease to the legislatively authorized ongoing general fund appropriation for the 2017-2019 biennium. The reduction would eliminate \$221,321 in salary and fringe for 1.5 FTE forester positions (natural physical science professionals). The agency's currently appropriated staffing level would drop from 27.0 FTE to 25.5 FTE. The additional FTE reductions will result in the loss of critical services and will further reduce the agency's capacity to provide financial, technical and educational assistance to communities, rural landowners, rural fire districts, schools and citizens of North Dakota. Based on program statistical data, a five percent reduction in forestry services may impact 17 fire departments, 12 communities and 98 landowners. The loss of 1.5 forester positions will erode the agency's ability to leverage external funding through grants and contracts because less state general funds will be available for match.

The 2017 Legislative Assembly reduced the Forest Service general fund budget by \$581,417 or 11.6 percent resulting in the elimination of 2.0 FTE forester positions (natural physical science professionals) and operating expenses for travel, supplies, repairs, information technology, professional development and equipment (under \$5,000). The Forest Service now relies on special funds including grants and contracts, as well as income from tree sales, to fund its 2017-2019 operating expenses. Although OMB budget guidelines do not limit the Forest Service special funds request amounts, the agency is taking this opportunity to examine the level of spending in all areas to ensure the most efficient operation and most effective use of resources from all funding sources.

3. 2019-2021 Optional Change - General Fund Savings Package (3%) - \$132,793

The Forest Service is required to identify an additional three percent general fund savings package in the IBARS budget system. This amount is \$132,793.

The Forest Service has identified \$56,248 in savings from its Capital Assets request for equipment over \$5,000. This savings package would eliminate all expenditures for equipment at the Towner State Nursery and the agency's field offices at Bottineau, Lisbon and Walhalla during the 2019-2021 biennium. Although capitalized funds are important for replacing old equipment and enhancing efficiency where skilled labor is in decline, the Forest Service believes it has the necessary equipment to fulfill its basic program needs during the 2019-2021 biennium. Replacement equipment purchases including shade cloth for tree seed beds and grounds keeping mowers at Towner State Nursery and the Bottineau field office would be postponed.

The remaining \$76,545 needed for the savings package would have to be derived from additional reductions in salary and fringe for 0.5 FTE forester positions (natural physical science professionals). When combined with the five percent reduction, the agency's currently appropriated staffing level would drop from 27.0 FTE to 25.0 FTE. The additional 0.5 FTE reduction will result in the loss of critical services and will further reduce the agency's capacity to provide financial, technical and educational assistance to communities, rural landowners, rural fire districts, schools and citizens of North Dakota.

2019-2021 Budget Request 244 - North Dakota Forest Service

	General Funds	Special Funds	Total
2017-2019 legislative appropriation	\$ 4,426,427	\$ 10,650,748	\$ 15,077,175
Appropriation adjustments Operational Carryover	\$ 425,847	-	\$ 425,847
Adjusted appropriation	<u>\$ 4,852,274</u>	<u>\$ 10,650,748</u>	<u>\$ 15,503,022</u>
Remove adjustment from above	<u>\$ (425,847)</u>	<u>-</u>	<u>\$ (425,847)</u>
Base budget before reduction	\$ 4,426,427	\$ 10,650,748	\$ 15,077,175
2019-2021 Needs Based Budget Request	\$ 4,426,427	\$ 10,650,748	\$ 15,077,175
Optional Changes:			
Optional General Fund Budget Reduction (5%)	<u>\$ (221,321)</u>	<u>-</u>	<u>-</u>
Adjusted Budget	\$ 4,205,106	No Limit	No Limit
2019-2021 budget request limit	\$ 4,205,106	No Limit	No Limit
Additional Optional Changes:			
2019-2021 Optional General Fund Savings Package (3%)	\$ (132,793)		

2019-21 Capital Project Request Recommendations

NDUS Facility Planning

Introduction

Budget directives issued in April 2018 by Governor Burgum indicated that new requests for capital projects and other one-time expenditures will be considered for inclusion in the 2019-21 budget recommendation. As such, NDUS institutions submitted up to three capital project requests to be funded from the state general fund. These projects represent the highest life safety, deferred maintenance and/or program enrollment-driven needs for the institutions. Institutions also presented non-general fund projects and potential sales of property for SBHE consideration. Projects are detailed on the following pages.

All of the general fund capital project submissions have been ranked in priority order. Projects were evaluated and ranked based on priorities and criteria as outlined in SBHE policy 902.1 as follows:

- Projects to meet life, health and safety requirements.
- Projects that are necessary to comply with local, state, or federal law or other requirements.
- Projects that preserve current assets.
- Projects that represent new strategic investments through the enhancement of current assets or the creation of new assets.

Consistent with direction of the SBHE Budget & Finance Committee, triple weight (3X) was assigned for life, safety & health needs. Double weight (2X) was assigned for deferred maintenance and critical maintenance. Recommendations contained within the NDUS system-wide master plan, information obtained from site visits, institution master plans, and project presentations were all taken into consideration. Projects that pose an immediate significant life, health, or safety concern were given highest priority. Where a tie existed the projects were ranked based on the potential impact of system failure.

The top two ranked projects – VCSU Fine Arts Building and NDSU Dunbar Hall – were first approved by the 2015 Legislative Assembly, with funding dependent upon tax revenue reaching specific targets, which did not occur. These two projects were also requested by the SBHE in 2017; however, neither was funded due to the State's revenue shortfall.

***Recommendation:** Chancellor Hagerott recommends the SBHE forward to the Governor, for his consideration, the top 10 ranked general fund projects, as shown on the following page. Chancellor Hagerott also recommends that all non-general fund projects and potential sales of property be forward to the Governor. If approved as recommended, the NDUS 2019-21 Capital Request will total \$328.0 million, of which \$230.8 million comes from non-general fund sources and \$97.2 million from the state general fund. The projects would address \$107.1 million in deferred maintenance, as well as the Institutions' highest life safety and deferred maintenance needs.*

2018 NDUS Capital Project Ranking Worksheet									
State General Fund (GF) Project Requests									
SBHE Rank	Institution	Project Title	Cost	Funding Source	Project Type			Institution Priority	Deferred Maintenance Reduction
					Program & Enrollment Driven Needs	Deferred Maintenance	Life Safety Issues		
1	VCSU	Fine Arts Building	\$ 32,275,887	GF	20%	40%	40%	1	12,910,355
2	NDSU	Dunbar	51,350,000	GF	5%	35%	60%	1	17,972,500
3	VCSU	Life Safety Projects	2,529,323	GF			100%	2	-
4	BSC	Card Access System	500,000	GF			100%	3	-
5	MiSU	Dome Wellness Emergency Generators	1,130,335	GF			100%	1	-
6	MiSU	Student Center Emergency Generators	690,000	GF			100%	2	-
7	DCB	Nelson Science Center PH 2	1,177,758	GF		50%	50%	1	588,879
8	DCB	Back-up Boiler	437,492	GF		50%	50%	2	218,746
9	MaSU	Deferred Maintenance/Life Safety	400,000	GF		75%	25%	2	300,000
10	NDSUS	Hektner Student Center Improvements	6,708,000	GF	25%	50%	25%	1	3,354,000
11	UND	Deferred Maintenance	45,000,000	GF		89%	11%	3	40,050,000
12	NDSU	Ag Products Development Center	54,000,000	GF	10%	75%	15%	2	40,500,000
13	BSC	Infrastructure Improvements	3,000,000	GF		100%		2	3,000,000
14	MiSU	Old Main Window Replacement	1,066,601	GF		100%		3	1,066,601
15	VCSU	Deferred Maintenance Projects	1,098,990	GF		100%		3	1,098,990
16	UND	STEM Building	109,500,000	GF	27%	68%	5%	2	74,460,000
17	UND	Merrifield Hall Renovation	35,000,000	GF	51%	45%	4%	1	15,750,000
18	NDSU	Engineering 2	32,150,000	GF	70%	20%	10%	3	6,430,000
19	MaSU	Old Main Phase 1	5,314,841	GF	55%	45%		1	2,391,678
20	DSU	Selke Hall Repurpose	19,000,000	GF	67%	27%	6%	1	5,130,000
21	BSC	Cyber Security Tech Center Addition	3,000,000	GF	100%			1	-
22	LRSC	Dakota Precision Ag Center	3,879,030	GF	100%			1	-
		Total General Fund	\$409,208,257						\$225,221,749
Non-General Fund Projects (Unranked)									
	Institution	Project Title	Cost	Funding Source	Type			Institution Priority	Deferred Maintenance Reduction
	NDSUS	Fargo Expansion	30,000,000	Private Donations	100%				-
	NDSU	Ag Products Development Center	6,000,000	Private Donations	10%	75%	15%		4,500,000
	NDSU	Barry Hall Renovation	3,000,000	Private Donations	100%				-
	NDSU	Indoor Practice Facility	37,200,000	Private Donations	100%				-
	NDSU	Softball Facility	2,000,000	Private Donations	100%				-
	NDSU	University Village PH 2	37,600,000	Revenue Bonds	5%	85%	10%		31,960,000
	UND	Athletics High Performance Center	35,000,000	Private Donations & Property Sales	65%	30%	5%		10,500,000
	UND	Memorial Union	80,000,000	Revenue Bonds	64%	31%	5%		24,800,000
	UND	Gallery Apts - Approval to sell							
	UND	1225 Stanford Road - Approval to sell							
		Total Non-General Fund	\$230,800,000						\$ 71,760,000
		NDUS Grand Total	\$640,008,257						\$296,981,749

Recommended

No. 1

VCSU FOSS HALL, including demolition of Foss and McCarthy - \$32,275,887 General Fund

This project was approved by the 2015 Legislative Assembly pending tax revenue in excess of projections. This project is one driven by forces outside of VCSU, namely the Sheyenne River, which because of its potential for flooding has placed Foss Hall (existing arts building) behind the new flood protection system where it awaits its fate. VCSU will demolish Foss Hall prior to the river if funding is made available, and as a bonus will remove the existing McCarthy Hall and consolidate the programs within those two buildings into one Fine Arts Building, removing significant deferred maintenance and life-safety problems. VCSU anticipates that 20% of the project budget will resolve Program and Enrollment Driven needs, with 40% addressing Deferred Maintenance and an equal amount addressing Life Safety.

No. 2

NDSU Dunbar Hall II-Phase I, including demolition of Dunbar (Chemistry, Biochemistry, Geosciences, Biological Sciences) - \$51,350,000 General Fund

Dunbar Hall II (replacement for the existing Dunbar Hall) has been a top priority for NDSU due in large part to the significant life safety risks posed by the condition of the existing structure. The 2015 legislative assembly had approved this project for general fund appropriation should tax revenue exceed budget projections by the amount required for the project. Revenues did not meet projections, and therefore the project was not funded as planned. The urgency and importance of this project remain as before, and NDSU has once again placed it as its top priority. NDSU estimates that 5% of the project budget will be used for Program and Enrollment Driven needs, 35% will address deferred maintenance, and 60% will correct life safety problems.

No. 3

VCSU Life Safety Projects - \$2,529,323 General Fund

As the title suggests, VCSU seeks funding for sundry life safety needs that range from card access to fire alarm/fire suppression systems.

No. 4

Bismarck State College - Card Access System - \$500,000 General Fund

Based on a recent live lockdown event, BSC has refined its needs for life safety and security as it relates to card access. This request will fund installation of a campus-wide card access system beyond what the limited housing system currently provides. Shelter-in-place directives can become a life saving effort on college campuses, with card access being the first step in this procedure. 100% of the funding is directed towards Life-Safety needs.

No. 5**Minot State University - Dome/Wellness Center Emergency Generators – \$1,130,335 General Fund**

MiSU currently has no emergency power generation for the “Dome” and adjacent Wellness Center. In the event of a power outage during winter months, the absence of emergency power could result in significant building system damage that could render the facility unusable for an extended period. In addition, having emergency generators would allow for vacating the building during a sports event or other situation with in a safe, controlled manner. 100% of this budget addresses Life-Safety needs at MiSU.

No. 6**Minot State University - Student Center Emergency Generators - \$690,000 General Fund**

As with the Dome/Wellness Center, the nearby Student Center at MiSU has no emergency power generator which can maintain life safety systems and critical building systems during a sustained power outage. Both proposed power units would make practical “shelter-in-place” options at MiSU in the event of a sustained power outage caused by a severe storm or similar event. 100% of this budget addresses Life-Safety needs at MiSU.

No. 7**Dakota College Bottineau - Nelson Science Center Phase 2 - \$1,177,758 General Fund**

Nelson Science Center received appropriations during the 2015 Legislative Assembly for mechanical renovations within the building. This laboratory space was in critical need of ventilation and other mechanical improvements, but as with many mechanical projects, additional needs surface as designs become finalized. DCB has exercised extraordinary economy in this project but must seek additional appropriations to realize the full potential of the original work. 50% of this project addresses life safety, while the remaining 50% covers deferred maintenance.

No. 8**Dakota College Bottineau - Back-up Boiler - \$437,492 General Fund**

The DCB back-up boiler is 50 years old and well beyond its service life expectancy. In addition, the boiler is smaller than the main coal-fired boiler, and subsequently unable to handle the full heating loads sustained in cold weather months. Past experience has indicated that a main boiler failure, if temperatures drop below zero for an extended period, will require that buildings be closed and operations directed elsewhere. This circumstance may result in building damage should pipes freeze and burst, rendering the building uninhabitable. 50% of the project cost addresses deferred maintenance based on boiler life expectancy, whereas 50% addresses life safety due to the potential for loss of heating.

No. 9**MaSU - Deferred Maintenance and Life Safety Repairs - \$400,000 General Fund**

MaSU has identified a number of roofing, general maintenance, security and safety related repairs that, if funded with one-time appropriations, would provide an opportunity to complete some large scale projects (relative to MaSU) while leaving their base operation and extraordinary repair budget intact for the smaller projects which are more routine and if completed establish a sustainable deferred maintenance program. MaSU estimates that 75% of the project budget will address deferred maintenance, with the remaining 25% addressing life safety needs.

No. 10**North Dakota State College of Science - Hektner Student Center Improvements - \$6,708,000 General Fund**

The Hektner Student Center (HSC) may be considered one of the most multi-functional facilities within the NDUS. It is literally a beehive of activity that hosts numerous auxiliary and academic functions, and has done so for approximately 60 years with very few improvements. It remains structurally sound, and NDSCS has identified underutilized space within the facility that will allow for expanding current areas that are overcrowded and essentially unsafe for programs such as Culinary Arts. This modest investment in the HSC will extend its operating life for many years, and represents an excellent investment in general fund appropriations as 25% of the project budget addresses Program and Enrollment Driven needs, 50% removes Deferred Maintenance liabilities, and 25% is used for Life – Safety improvements.

NDSCS - Career Workforce Academy (Fargo) – \$30,000,000 Other Funds (may include donations, gifts, grants, bequests)

NDSCS is in the process of establishing both program and operating parameters for a workforce academy facility to be located in the Fargo metropolitan area which would be established as an educational partnership with Cass/Clay county public K-12, local industries and focuses on students in grades 10 – 12 as well as individuals currently employed in industry. The education offered will tender early entrance options for career/technical education programs or certificate programs; opportunities to graduate from high school while at the same time completing a training certificate or program; provide career awareness education opportunities for secondary and post-secondary students; and provide customized training programs for currently employed workers that targets skills matched to workforce demands. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the project within this budget cycle is imperative for the project to be considered by the board within the next three years.

NDSU - Barry Hall Renovation - \$3,000,000 Other Funds (may include donations, gifts, grants, bequests)

NDSU is proposing to solicit funds for renovation of the 2nd floor area of Barry Hall in the existing ND Trade Office Area, and create an Active Learning Classroom as well as event space. The improvements would allow NDSU to add active learning classes to its curricula, as well as host public events. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the project within this budget cycle is imperative for the project to be considered by the board within the next three years.

NDSU - Indoor Practice Facility - \$37,200,000 Other Funds (may include donations, gifts, grants, bequests)

As with many NCAA Division 1 institutions located in regions where outdoor athletic practice can be hampered by seasonal weather conditions, NDSU is facing similar problems. Although existing facilities such as the Fargo Dome and the recently installed inflatable shelter offer shelter from the weather, the Dome presents scheduling difficulties, and the inflatable shelter has costly operational needs. Constructing a modern indoor practice facility will allow NDSU teams freedom of schedule to practice year around, and will greatly enhance athletic achievement, which in turn benefits the academic success of the athlete. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the

project within this budget cycle is imperative for the project to be considered by the board within the next three years.

NDSU - Softball Facility - \$2,000,000 Other Funds (may include donations, gifts, grants, bequests)

NDSU had considered putting the 8 time Summit League softball champions and 2014 baseball champions in the proposed indoor practice facility (above), but the convergence of needed equipment and space made merging the other sports with the ball-batting venues impractical (and possibly dangerous if you bop a fullback with a softball.) The solution came as a secondary facility which would house the softball and baseball training needs separate, while doing so at a very modest cost. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the project within this budget cycle is imperative for the project to be considered by the board within the next three years.

NDSU - University Village Replacement Phase II – \$37,600,000 Other Funds (Revenue Bonds)

Building on the success of Phase I, NDSU plans to further raze portions of the original University Village and complete construction of as many as 3 new four-story buildings, yielding up to 240 apartments. Totals will be dependent upon current market conditions when construction begins in 2019. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the project within this budget cycle is imperative for the project to be considered by the board within the next three years.

UND -Athletics High Performance Center (HPC) Phase II - \$35,000,000 Other Funds (may include donations, gifts, grants, bequests)

UND has requested and received authority to begin fundraising for this project. It will be an addition to the newly constructed HPC, and include additional training facilities, coaches' offices, and other spaces left out of Phase 1. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the project within this budget cycle is imperative for the project to be considered by the board within the next three years.

UND - Student Memorial Union II - \$80,000,000 Other Funds (Student Fee Revenue Bonds)

The existing Student Memorial Union at UND is one of the most traveled buildings on campus, and currently has one of the most significant deferred maintenance backlogs. With consideration for modern use, UND is proposing a new facility which will replace the existing structure that is to be demolished. Authorization to proceed with this project requires SBHE approval once all funding and operational information has been established. Because legislative authorization must be provided as well, including the project within this budget cycle is imperative for the project to be considered by the board within the next three years.

UND - Budget Inclusion Item: Approval to Sell 1225 Stanford Road

UND - Budget Inclusion Item: Approval to Sell Gallery Apartments

Not Recommended

These projects have been ranked and could be presented to the Governor and Legislative Assembly upon request.

No. 11

University of North Dakota - Deferred Maintenance Pool - \$45,000,000 General Fund

As a means to resolve the ongoing deferred maintenance liability, UND requests an “omnibus” package of funding, which can be used for numerous deferred maintenance projects across campus. Projects range from roof and window replacements to mechanical and electrical system upgrades. UND anticipates 89% of the project budget will address deferred maintenance, while 11% will address life-safety issues.

No. 12

NDSU - Ag Products Development Center - \$54,000,000 General Fund; \$6,000,000 Other Funds (may include donations, gifts, grants, bequests)

North Dakota’s agricultural sector is dependent upon NDSU’s meat and plant research efforts for development of the state’s many agriculture products. Currently, this type of research and education is being conducted in Harris Hall and Shepperd Hall, both of which are either ill-suited for this function, in general poor condition, or both. Harris Hall is one of two buildings on the NDSU campus having the highest level of deferred maintenance. If funding is secured, a new building will be constructed on the site of aging greenhouses (to be demolished), and functions within Harris Hall will be transferred to the new facility and subsequently Harris Hall will be demolished. The meat lab currently located in Shepperd Hall will be transferred to the new facility as well, with that space repurposed once the meat lab is relocated. NDSU estimates that 10% of the project budget will address Program and Enrollment Driven needs, 75% will remove Deferred Maintenance liabilities, and the remaining 15% will resolve Life-Safety issues.

No. 13

BSC - Infrastructure Improvements - \$3,000,000 General Fund

BSC has identified a number of roof replacement, buried utility repairs, and sundry mechanical repairs which, if funded, would significantly reduce its deferred maintenance liability, as 100% of the funding would address that need. Grouping the projects together to the greatest extent possible would provide for efficiencies and economies over and above that obtained by completing the projects on an individual basis.

No. 14

MiSU - Old Main Window Replacement - \$1,066,601 General Fund

MiSU is one of the four original normal schools in North Dakota, with each sharing a historic landmark “main building” which symbolized North Dakota’s commitment for educating teachers. MiSU is committed to retaining Old Main as a functional academic facility, but must address the failing windows in order to preserve the structural integrity of the building envelope. Doing so will greatly extend the useful life of this historic building at a very modest cost, as well as enhancing its historic appearance. 100% of this project budget will address Deferred Maintenance liabilities.

No. 15**Deferred Maintenance Projects - \$1,098,990 General Fund Appropriations**

As with Life Safety needs, VCSU requests funding to address a number of sundry Deferred Maintenance projects, which include everything from roof replacement to mechanical / electrical system upgrades. As with the needs at MaSU, obtaining GF appropriations for various deferred maintenance and life safety needs will allow greater efficiencies in acquisition as combining smaller projects into one larger project reduces costs. It will also free the base funded operations budget that typically cannot afford a large number of projects at any one time, and allow VCSU to begin a process whereby it can sustain its lowered deferred maintenance liabilities.

No. 16**UND - STEM Building - \$109,500,000 General Fund Appropriation**

UND is proposing a very ambitious and praise-worthy solution to both its program and enrollment needs as well as its excess space inventory with a new project that combines partial and complete demolition with new construction and renovation. The STEM project focuses on the critical needs of Science, Technology, Engineering and Mathematics by placing modern classroom and class lab space in the midst of existing STEM programs. The scope of work involves demolition of the existing Witmer Hall, as well as parts of the existing Hyslop Sports Center. A new, 109,000 square foot facility will absorb the vacated space, while linking the renovated and repurposed portions of Hyslop Sports Center with similarly adjusted Starcher Hall. The project will also allow UND to idle Columbia Hall and plan for its future. UND estimates that 28% of the project budget will be dedicated to Program and Enrollment Driven Needs, 68% to Deferred Maintenance, and 5% to Life Safety.

No. 17**UND - Merrifield Hall Renovation - \$35,000,000 General Fund Appropriation**

Merrifield Hall is the genesis home of teacher education in the state of North Dakota. Webster Merrifield was UND's third president, and called "The Father of Secondary Education in North Dakota." His namesake building is of lasting structural soundness, but is in desperate need of modernization in order to continue as one of the most heavily used classroom buildings on the UND campus. This renovation project will establish the infrastructure and classrooms needed for today's modern instruction, and as a result will serve the state faithfully for many years to come. UND estimates that 51% of the project budget will be used to resolve Program and Enrollment Driven needs, while 45% and 4% will be used for Deferred Maintenance and Life/Safety respectively.

No. 18**NDSU - Engineering 2 - \$32,150,000 General Fund**

NDSU requests appropriations to construct an addition to the existing engineering complex as a means to reorganize the overall lab/classroom/research complex to better utilize existing space and contiguous areas within the complex. Currently over-utilized, existing lab spaces are compromised for safety by overcrowding and congestion. Adding the new space as a means to relocate research functions away from the core of the complex will allow for expansion of badly needed lab space in areas whereby efficiencies in class movement can be realized, as well as mechanical / electrical system utilization. NDSU anticipates that 70% of the project budget will address Program and Enrollment Driven needs, 20% for Deferred Maintenance, and 10% for Life Safety issues.

No. 19**Mayville State University - Old Main Renovation Phase 1 - \$5,314,841 General Fund**

Thanks to careful stewardship, MaSU enjoys one of the lowest deferred maintenance liabilities of any NDUS institution. A critical aspect of their approach has been the strategic removal of outdated facilities that consume an excessive share of operational resources. Where older buildings have great historical significance, renovation projects which revitalize the mechanical systems, electrical systems, and interior spaces create like-new facilities at a reasonable cost which retain their historical significance. MaSU plans such an approach for its Old Main building, which is an icon for this institution and similar in design to the other, original normal schools in North Dakota. The project represents good value, and would serve to lower the overall deferred maintenance at MaSU to a sustainable level. MaSU estimates that 55% of the budget will address Program and Enrollment Driven needs, while the remaining 45% will be used for Deferred Maintenance repairs.

No. 20**Dickinson State University - Selke Hall Repurposing - \$19,000,000 General Fund**

Selke Hall is an underutilized multi-story residence hall centrally located between Stoxen Library and the Student Center. The dormitory style housing is outdated and difficult to lease, but structurally sound and presents an economical repurposing solution for the visual & theater arts programs currently located in substandard facilities. The conversion would eliminate significant deferred maintenance while adding a modest addition. Because of its location, repurposing this facility makes both economic and programmatic sense as it allows greater interaction between students and faculty on campus. Its proximity to Stoxen library also suggests other potential uses (albeit with an increased budget) for other academic/library functions. DSU estimates the total project costs are composed of 67% Program and Enrollment Driven needs, 27% Deferred Maintenance reductions, and 6% Life Safety repairs.

No. 21**Bismarck State College - Cyber Security Tech Center Addition - \$3,000,000 General Fund**

BSC is establishing a Cyber Security degree program which will offer AAS and certificate training directly, and BAS and higher degree education through partnerships with other NDUS institutions. The planned addition will be part of the existing Technical Center, which (based on projected enrollment) will have insufficient space for this program. The project is a new addition which does not address any specific life safety or deferred maintenance liabilities, but instead funds program and enrollment driven needs that are a growing and a critical need for the region.

No. 22**Lake Region State College - Precision Ag Center: \$3,879,030 General Fund**

The Precision Ag program demonstrates great promise for the agriculture industry in North Dakota, and translates directly into increased farm profits and efficiencies. The existing facility is a rented, former implement dealership that suffers from rat and pest infestations, grease stained floors, a septic system inadequate for occupancy, and overall indoor environmental quality more suited for machinery storage than education. Relocating the program within the LRSC campus will alleviate these problems, and further allow closer interaction between other faculty and students. Although LRSC considers the project budget 100% program driven, eliminating what is at best a deplorable, sub-standard learning environment goes beyond this definition.

Summary of 2019-21 Biennial GF Budget Requests

NDSU Related Entities

	NDSU Extension, Main & Branch REC's (SBARE Request)	Northern Crops Institute (NCI)	Upper Great Plains Transportation Institute (UGPTI)	Total
2017-19 Adjusted Base Appropriation	\$92,345,992	\$1,886,891	\$3,543,174	97,776,057
Part 1 Base Budget Request:				
Five/Ten percent budget reduction	(9,219,634)	(94,345)	(172,159)	(9,486,138)
Road & Bridge Management System			(100,000)	(100,000)
Decrease in estimated bond payments	(88,182)			(88,182)
Decrease from 2017-19 Base	(9,307,816)	(94,345)	(272,159)	(9,674,320)
Total 2019-21 Base Budget Request	83,038,176	1,792,546	3,271,015	88,101,737
Part 2 Optional 2019-21 Base Budget Request:				
Restoration of 5%/10% base reduction	-	94,345	-	94,345
Three percent Savings Package	(2,765,890)	(56,607)	(103,295)	(2,925,792)
Restoration of Three percent Savings Package		56,607		56,607
Extension Operational Support - County & State programming	870,000			870,000
Experiment Station - \$710,000 for 4 FTE's focusing on microbe livestock and organismal plant interactions, \$450,000 operating funds	1,160,000			1,160,000
Experiment Station - Precision Ag research	800,000			800,000
Experiment Station - \$280,000 REC operating support; \$210,000 Main Station operating support; \$200,000 Oakes site operating support.	690,000			690,000
Total Optional Base Budget Requests	754,110	94,345	(103,295)	745,160
Total Parts 1 and 2	83,792,286	1,886,891	3,167,720	88,846,897
Part 3 Optional 2019-21 One-time Budget Request				
Extension - overhaul and reimage NDSU Extension Service's online presense	345,000			345,000
Experiment Station - Capital Request - Agronomic, Pathology, and Soils Field Lab facility(Waldron Hall replacement)	65,000,000			65,000,000
Experiment Station - WREC seed cleaning facility	750,000			750,000
Experiment Station - 8 storage sheds to store research plot equipment.(\$300,000 each shed)	2,400,000			2,400,000
Experiment Station - Precision Ag/ABEN facility; for testing of ag equip. & technology.	6,000,000			6,000,000
Deferred maintenance for main Station and all REC's	1,440,465			1,440,465
Road & Bridge Planning Center	-		975,000	975,000
Transformative Technologies Program	-		500,000	500,000
Total One-Time Requests	\$75,935,465	\$0	\$1,475,000	\$77,410,465

State Board of Agricultural Research and Education
Report on the 2019-21 Prioritized Budget Request and Annual Evaluation of
Research Activities and Expenditures pursuant to North Dakota Century Code
Section 15-12.1-17
Keith Peltier, Chair

Dear Chancellor Hagerott,

For the record, my name is Keith Peltier. I am the General Manager of ProSeed Inc. and an Ag Coalition appointee to the State Board of Agricultural Research and Education (SBARE). I currently serve as the Chairman of SBARE. The North Dakota Agricultural Experiment Station and NDSU Extension are critical to enhancing the Agricultural industries in the state and improving the lives of all North Dakotans. Thanks for the opportunity to provide this annual report and budget priorities.

The State Board of Agricultural Research and Education (SBAR) was established by Legislative decree in 1997. It was responsible for budgeting and policy-making associated with the supervision of the North Dakota Agricultural Experiment Station. The law was amended in 1999 to include responsibility for the North Dakota State University (NDSU) Extension Service and the name was changed to the State Board of Agricultural Research and Education (SBARE).

As outlined in 15-12.1-17 there are 10 responsibilities of SBARE:

- 1. Determine the causes of any adverse economic impacts on crops and livestock produced in this state;*
- 2. Develop ongoing strategies for the provision of research solutions and resources to negate adverse economic impacts on crops and livestock produced in the state;*
- 3. Develop ongoing strategies for the dissemination of research information through the Extension Service;*
- 4. Implement the strategies developed under subsections 2 and 3, subject to the approval of the state board of higher education;*
- 5. Develop, with the agricultural experiment station and the extension service, an annual budget for the operations of these entities;*
- 6. Develop a biennial budget request based on its prioritized needs list and submit that request to the president of North Dakota state university and the state board of higher education, and forward its prioritized needs list and request without modification to the office on management and budget and the appropriations committees of the legislative assemblies;*

7. *Maximize the use of existing financial resources, equipment, and facilities to generate the greatest economic benefit from research and extension efforts and to promote efficiency;*
8. *Annually evaluate the results of research and extension activities and expenditures and report the findings to the legislative management and the state board of higher education;*
9. *Advise the president of North Dakota state university regarding the recruitment, selection, and performance of the vice president of agricultural affairs, the extension service director, and the station director; and*
10. *Present a status report to the budget section of the legislative management.*

Below is a summary of activities undertaken by SBARE in 2017-2018:

1. Senate Bill 2020 included the following item:

SECTION 15. STATE BOARD OF AGRICULTURAL RESEARCH AND EDUCATION - NORTH DAKOTA STATE UNIVERSITY EXTENSION SERVICE STUDY - BUDGET SECTION REPORT. During the 2017-18 interim, the state board of agricultural research and education, in consultation with the governor's office, shall study the duties and responsibilities of the North Dakota state university extension service. The study must include a review of the mission, existing programs, the efficiency and effectiveness of the delivery methods for existing programs, and potential program changes. The state board of agricultural research and education shall report its findings and recommendations to increase the efficiency and effectiveness of the North Dakota state university extension service to the budget section of the legislative management by March 31, 2018.

SBARE formed a working group to evaluate NDSU Extension. The group completed the earlier this year, and presented its findings to the Budget Section in March, 2018.

2. As part of its ongoing evaluation of Research and Extension activities, SBARE voted to close 30.28 FTE positions at the Main Research Station, 10.25 FTE positions at the Branch Research Extension Centers, and 12.47 FTE positions in the NDSU Extension Service.
3. As required by the Century Code, SBARE develops the biennial budget request by receiving information from stakeholders. Beginning in November 2017, SBARE invited more than 300 stakeholder groups, citizens, and other interested parties to share their thoughts and concerns about agricultural research and extension efforts in the state. The input has been in the form of oral presentation and/or written testimony.

Items were evaluated, ranked, and prioritized. Final ranking of programmatic initiatives, Capital improvement projects, and one-time expenditures was completed in May, 2018. These budget requests are presented for your approval.

Agriculture is a dominant force in North Dakota's economy and will continue long into the future. Similarly, Ag Research and Extension have a long history in North Dakota; their activities are critical to this important sector of the state's economy. Thanks again for your past and future support.

Sincerely,

Keith Peltier
SBARE Chair

Attachments

NDSU Extension Program Initiatives Final Ranking by SBARE – 5/3/2018

Extension Operational Support

Justification. NDSU Extension is structured to respond to locally identified needs with science-based education through Extension agents who have a strong relationships in their communities. Extension agents are supported by specialists located on campus and at Research Extension Centers who have specialized expertise to develop science-based recommendations and training programs in agriculture, natural resources, families and communities. The Center for 4-H Youth Development supports youth programs across the state.

In late 2017 and early 2018, the State Board of Agricultural Research and Education solicited citizen input on priorities for the upcoming legislative session. The board received nearly 150 pieces of written or oral testimony which emphasized the importance of Extension to the citizens of North Dakota and highlighted the value of the local presence of Extension in communities across the state. Because NDSU Extension funding was reduced by 13.9% in the 2017-2019 biennium, Extension and North Dakota County Commissioner Association collaborated on a new cost-share agreement to fund Extension agents where the counties would fund 40% of the agent's salary and benefits and Extension would fund the remaining 60%. This agreement increases the support provided by counties by approximately \$820,000 on a state-wide basis for the biennium. While the counties are very supportive of the services of their local Extension agent, they are on record in seeking *“to restore state funding so that a longer-term funding model that reduces the property tax burden can be achieved.”*

NDSU Extension specialists provide valuable leadership to complex issues such as soil health, nutrient management, cropping systems, herbicide and insect resistance, drought response and livestock management, and leadership programs like Rural Leadership North Dakota. Specialists rely on operating funds to develop and travel to training workshops and field events, soil health café talks, and training events on nitrate testing for drought damaged forages, etc. They train Extension agents, ag-professionals and consultants, and agency partners which is multiplied to help support the \$9B agricultural industry in North Dakota.

Need. North Dakota receives incredible public value from Extension agents in their local counties. To sustain local delivery of Extension programs and services, additional funding is needed so Extension can continue to partner with counties to fund Extension agents. To maintain the effectiveness and efficiency of Extension specialists, they need increased operating support to continue their development and delivery of high impact programs for North Dakota.

- **Operating support – \$870,000 (\$670,000 for county programming and \$200,000 for state programming)**

One-time funding request

Extension Web and Digital Delivery

Justification. SBARE's Review of Extension recommended that Extension optimize the use of technology and target younger age demographics to enhance the effectiveness and efficiency of delivery methods.

To accomplish this goal, Extension needs a new web strategy and reimagining of content options to meet future opportunities and ever-changing user needs.

Reimagining the Extension web presence is a significant undertaking because of the complexities of diversity of materials, the diversity of who generates and manages content, how Extension users access the content (e.g. computer, smart phone), and how users interact with the apps and curricula.

NDSU Extension's current web presence has evolved into a decentralized system as our content management system allows specialists, REC staff, and county staff to post directly to their websites with a focus on localized content. This approach relied on staff expertise as Extension lacked sufficient web specialists to manage all of the content currently contained on 123 topic sites, 13 REC sites, and 52 county sites. Web delivery is a critical component of Extension's educational delivery system as NDSU Extension websites had 953,897 users and 3,546,916 page views in 2017.

NDSU Extension's web presence serves as an important platform to support a diverse array of electronic media. Extension has about 645 publications available online of which about 300 are only available on the web. Nearly all publications are now in html format for easy smartphone and tablet use along with a PDF option for high-quality printing. Online publication access is popular as 59,482 users made 307,912 page views in 2017. Extension has 722 You Tubes videos on 11 channels and had 261,759 views in 2017. Extension posts podcasts cover crop and livestock issues and are available as feeds via iTunes, Google, Yahoo or NDSU and are used by radio stations and directly by producers. Extension uses multiple platforms for online meetings, webinars, and trainings such as the interactive video network, Blackboard Collaborate, Moodle and Skype for the public and staff. Blackboard Collaborate, which is provided by NDUS, is used more for training the public and counties often provide local viewing sites with additional in-person training. Several traditional newsletters have transitioned to electronic distribution and posting. For example, the Crop and Pest Report is emailed as a PDF to their list serve (4,865 subscribers) and articles are cross posted on the web (215,133 page views in 2017). Other newsletters are distributed by Mailchimp as an e-newsletter. Finally, Extension has a strong social media effort with 81 NDSU Extension-related Facebook pages and numerous NDSU Extension Twitter accounts.

A new web strategy and reimagining of content will allow Extension to:

- Optimize content for smartphones and tablets and emerging technologies such as voice-assisted search and augmented reality, especially to reach younger audiences
- Optimize navigation and search features
- Add more social media use
- Incorporate more interactive applications
- Feature more interactive educational modules
- Explore incorporation of customer relationship management software options

Extension needs this enhanced web presence to augment the transformational education, which is the foundation of Extension's mission.

Need. This one-time funding request will add temporary support to overhaul and reimagine NDSU Extension Service's online presence.

- **One-time operating support - \$345,000**

North Dakota AES – 2019-21 Programmatic Initiatives - Final 5/3/2018

A. Agri biome Initiative

Knowledge of the human microbiome has revolutionized medicine and nutrition and fueled the \$45 billion probiotics industry. A similar revolution is happening in agriculture, where the microbiomes of crops, soils, and livestock (the **Agri biome**) are being harnessed to increase productivity, efficiency, safety, and quality. Food production must double to meet the global population demand by 2050, despite depleting water resources, shrinking farmland, and rising input costs. The inputs that drove intensive crop production in the 20th century have diminishing returns and may lead to unintended environmental consequences, so the next agricultural revolution must be based on a more sustainable approach that harnesses microbiomes to increase water- and nutrient-use efficiency, stress tolerance, disease resistance, and production of high quality food and agricultural products.

Microbes were an untapped resource until recently, with just a tiny fraction of the microbial world accessible by traditional research methods. Major scientific breakthroughs now allow all microbes to be readily identified, creating a platform for innovation through the discovery of microbes with desirable traits in agriculture (*agricultural probiotics*). While all sectors of agriculture can benefit from the development of probiotics, the potential gains in crop and livestock production are as exciting as they are highly relevant to North Dakota. The North Dakota Agricultural Experiment Station (NDAES) has several areas of strength that can support an **Agri biome** initiative focused on crop and livestock production. These include:

- Strong programs in plant breeding, genetics, and genomics; plant nutrition; plant pathology; soil health; and water quality.
- Strong programs in animal nutrition, physiology, husbandry, genetics, and health as well as range sciences and forages.
- Facilities to study microbiomes from lab to field or herd scale.
- Infrastructures to connect researchers with producers across the state to understand problems, identify solutions, and translate discoveries into practical applications.

Research focused on the rhizosphere microbiome (microbes at the soil-root interface) will have the large impacts on productivity, efficiency, and quality of both crops and livestock. In addition to a role in discovery, NDAES has the facilities to test the performance of microbial products at the laboratory, greenhouse, field, and herd scale. These activities would be of benefit to the ND producers as well as provide benefit to the private sector, by ensuring the efficacy of products that may be available in the market. A number of crop and livestock production challenges can be addressed by this initiative, including:

- *Nitrogen use efficiency*. Less than 50% of nitrogen applied as fertilizer is used by the plant. Unused nitrogen can leach into groundwater or runoff into surface water, causing pollution. Engineering the rhizosphere microbiome to increase nitrogen use efficiency will improve water quality and reduce fertilization costs. Additionally, nitrogen use efficiency in livestock is a critical concern in terms of both productivity gains and environmental stewardship.
- *Productivity in saline soils*. About 13% of the land area in North Dakota is affected by surface salinity. It is estimated that more than \$150 million in revenue is lost annually in the Red River Valley alone due to salinity-related yield reductions in corn, soybean, wheat, and sugarbeet. One approach to this problem is to transplant microbes from salt tolerant plants to salt sensitive crops to increase production yields in saline soils.

- *Livestock exist in a uniquely symbiotic relationship with the Agribiome, including the microbiome present with the livestock, the soil, and their feedstuffs.* In North Dakota, this is especially important as most of our livestock enterprises include ruminants, which rely on microbes to ferment forages and other feedstuffs. A number of areas of research may yield significant impacts, including:
 - *Digestive physiology.* Gut microbes are critically important to nutrition, and they impact nutrient fermentation, nutrient use efficiencies, digestion, absorption, and the epigenome. Enhanced understanding of the gut agribiome will improve growth, digestion, and production efficiencies; while at the same time enhancing sustainability and environmental stewardship
 - *Animal Health.* The agribiome plays an important role in animal health. Obtaining a better understanding of the role the agribiome has on animal health should lead to advances in vaccine and antimicrobial efficacy, as well as improved disease resistance in livestock.
 - *Food Quality and Storage Characteristics.* A better understanding of the role of the agribiome on food quality and storage characteristics could lead to enhanced storage methods, higher food quality products, longer shelf life, and reductions in food borne illnesses.
- *Drought tolerance.* The drought tolerance of crops can be enhanced by incorporating microbes that are adapted to drought conditions into the microbiome of crops and forages grown in dry conditions.
- *Food Quality and Health.* Engineering the microbiome to increase phytonutrients and create functional foods to counter diet-linked chronic diseases such as diabetes.

REQUEST: 2.0 FTE scientist and technician (\$355,000 salary and fringe - focusing on microbe-livestock interactions) and 2.0 FTE scientist and technician (\$355,000 salary and fringe - focusing on organismal-plant interactions); \$450,000 operating. **Total - \$1,160,000**

Addressing important areas of the Agribiome related of crop and livestock production will require a multi-faceted approach. While several scientists are already engaged in researching some aspects of the Agribiome, additional scientists will reduce gaps in our existing expertise and move North Dakota to the forefront in this critical area.

B. Precision Agriculture

The future of farming will be 'smart farming' that incorporates computer systems to make real-time decisions based on digital data (artificial intelligence) of the conditions in the field. The smart farm is expected to have increased production efficiency, reduced labor costs, and better net return, while providing more protection to the environment. These technological innovations in precision Ag are taking place at a fast pace, with new technologies coming to market every year. A 2018 survey by Glacier Farm Media (www.farmmedia.com) indicates that 89-90% of farmers surveyed felt that using sensors, digital data, and autonomous systems can decrease production cost, increase yield, and/or save time. Unmanned Aerial Systems (UAS), for example, used in precision agriculture are expected to contribute up to 80% of the \$80 billion UAS market by 2025.

North Dakota has a large concentration of companies involved in precision Agriculture that seek partnerships with NDSU to expand and field validate their technologies. Agricultural producers need research-based information on profitable precision Ag technologies to adopt, best utilize, or optimize these technologies on individual farms, and learn how to convert the huge amount of data collected in the field to appropriate decisions.

Some of the more recent issues with chemical application (e.g., Dicamba drift), effective management of resistant weeds, nutrient management in crops, assessing weather damage on crops, as well as managing fields for better soil health, etc. are just some of the areas precision agriculture can contribute.

Return on Investment

Precision Ag research at NDSU will benefit the North Dakota agricultural industries by increasing crop yield and efficiency of food production, and reducing inputs. Adopting precision Ag can result in economic benefit of as much as \$165/A in North Dakota (Schimmelpfennig, USDA, 2016)

Precision Ag can improve both soil health and water quality by minimizing runoff of inputs. It also can improve grain quality through the timely and precise application of inputs to the developing crops, resulting in additional benefits to the producers and environment.

Investing in precision Ag research will facilitate partnerships with the private sector, both established and startup technology companies. Precision Ag scientists at NDSU can address research needs in the state and collaboration requests from major agriculture and technology companies in the state. North Dakota has a large number of startup companies, and many major precision agriculture technology providers, which makes the state well positioned to be a leader in precision agriculture. Enhancing a strong research program at NDSU is critical to complementing these entrepreneurial efforts.

REQUEST: The 2015-17 Legislative session provided \$600,000/biennium in operating funds for Precision Ag research. These funds are distributed through an internal competitive grants process. In each biennium, funds requested greatly exceeded the amount that was distributed. An increase in **Operating (\$800,000)** is requested to establish a smart crop farm at Casselton and a smart livestock farm at Fargo that utilizes sensors, autonomous systems, and data to make crop management decisions, and to evaluate these decisions in partnership with industries.

Currently, we have gaps in expertise in the following areas:

- Big data management and machine learning in precision agriculture: Vast amounts of data are collected by sensors, unmanned aerial systems, and agriculture machinery. Research is needed to develop crop management decisions by applying machine learning methods to these data and to develop data management strategies necessary for smart farms of 21st century.
- Site-specific chemical application: Examples of issues that need to be addressed include monitoring herbicide injury (e.g., glyphosate injury in crops or Dicamba in non-tolerant crops), establishing conditions contributing to herbicide drift, temperature inversion effects, site-specific weed management, and herbicide resistance management in weeds. Research is also needed on precision management of insect pests and diseases.
- Robotics and autonomous systems: Machinery manufacturers are requesting partnerships to develop sensors and intelligent systems that make their machines more autonomous (where a computer makes decisions rather than an operator). Major industries are approaching NDSU for research collaboration, as autonomous and robotic systems can improve operational efficiency, and reduce labor requirements.
- Nutrient management: Site-specific management of nutrients in crops can improve soil health. Precision agriculture technologies can help in monitoring soil problems and manage crop by square inch to improve soil health.
- Economic viability of precision agriculture technologies: New precision Ag technologies are coming at a fast pace without adequate independent study on their economic viability. Therefore, it is important evaluate technologies for their economic viability. Also, the crop budgets handled by most farm management software need to be modified to include site-specific input application regimes.

C. Enhancing Research Capacity - Increased Support for Operations

Agricultural research is a labor-intensive effort spanning a number of disciplines to improve the profitability of farming, ranching, and agribusiness enterprises. A strong focus of the research effort at the NDAES is to work on providing solutions to problems that affect crop and livestock production, improve production efficiency, product quality, and environmental sustainability.

Operating costs for research activities continue to increase. Scientists at the RECs and the Main Station receive high levels of grant funding from a variety of agencies. However, inflationary pressures on operating costs, such as state motor pool leasing, equipment repairs, and supplies, reduce our ability to respond to current and future production-related issues affecting crop and livestock producers. In addition, it is critically important that our scientists remain relevant by incorporating new technologies into our research programs, which allows the NDAES to emulate the rapidly changing technology environment that exists in 21st Century Agricultural systems.

An increase in operating funds for RECs (\$30,000/REC/biennium) was last received in the 2015-17 session. Funds for the 2019-21 biennium would be used to offset increasing costs of fuel, supplies, minor equipment, and timeslip (student) labor needed for our existing research projects.

The Oakes Irrigation Site has been funded through the Garrison Conservancy District. This funding will no longer be available in the near future. The facility has been supervised through the Carrington REC, but is entirely grant supported. Stakeholders in the region have made commitments to provide support for the Oakes site, including a gift of 40 acres to increase the research land area. The facility carries out research on high-value irrigated crops for the SE region of ND.

REQUEST: Operating support for REC's - \$280,000; Operating support for Main Station - \$210,000; Operating support for Oakes site - \$200,000. **Total - \$690,000**

North Dakota Agricultural Experiment Station
2019-21 Capital and One-Time Request
5/3/2018

Agronomic, Pathology, and Soils Field Lab facility (\$65,000,000 approx.) (Waldron Hall replacement) - Waldron Hall was built in the mid-1950's to house the field laboratories for the wheat breeding programs in the Department of Agronomy. An addition was built in the mid-1960's to house approximately another 16 scientists from the Departments of Agronomy and Plant Pathology. The building now houses field labs and wet labs for nearly 60 scientists, each with numerous projects, at the Main Station involving a number of disciplines. Many of these labs are shared and the seed drying, cleaning, and storage facilities needed by our scientists are now grossly insufficient and a health hazard to anyone working in the facility. A new facility is needed to provide our scientists a safe environment to conduct their research, as well as processing, cleaning, and storing seed.

Seed cleaning facility WREC (\$750,000) - Seed cleaning facilities at WREC need to be replaced. Current facilities are antiquated, lack reliable capability to ensure high quality seed, are slow, and inefficient. Current facilities were designed to handle cereal crops and have limited/no capability of cleaning pulse crops and other fragile seed that are in high demand. These facilities pose considerable worker safety issues. A fundraising effort is underway

Equipment Storage Sheds (8) (\$300,000/shed)— Purchasing and/or leasing expensive field equipment is an investment that the AES needs to protect. Storing expensive research plot equipment, such as tractors, seeders, and combines, outdoors reduces the life of the machines and can compromise the sophisticated electronics typically used on equipment.

Precision Ag/ ABEN Facility (\$6,000,000) - A field lab with large indoor space and accessibility to perform research, demonstration and field testing of Ag equipment and technology. Additional infrastructure would include a 100-ft long soil bin to test soil-tool interaction of tillage equipment and a high speed wind tunnel to test nozzles for spray drift and droplet size distribution of active ingredients under various weather conditions. The facility would be critical in conducting research and training on agricultural technologies such as unmanned aerial surveillance, variable rate application systems, precision planting, and other technology used in crop and livestock systems.

One-time funding request

Deferred Maintenance increase – (\$1,440,465) Deferred maintenance funding continues to be an important issue. Updates and repairs to facilities that enhance worker safety and productivity are needed across the AES. Various and ongoing issues exist at Main Station and all RECs, primarily with respect to facility updates and repairs.

Upper Great Plains Transportation Institute Budget Initiatives: 2019-2021

Two budget initiatives have been developed and approved by the Legislative Committee of UGPTI's Advisory Council. The first one (the County Road and Bridge Planning Center) is the highest priority of the Council.

County/Local Road & Bridge Planning Center

A high-quality highway system is essential for personal and freight mobility and sustained economic growth. Movements from farms to initial storage or transfer facilities depend on county and township roads. Much of the crude oil produced in western North Dakota moves from wells to pipeline and rail transfer facilities by truck. Similarly, most of the inputs needed for oil production are delivered by truck to remote production sites located off the state highway system. County and township roads are heavily utilized in many areas of the state and are essential to the state's rural economy.

With higher crude oil prices and increased business activity, changes in highway traffic are expected to occur throughout the state. In the past, the Upper Great Plains Transportation Institute has provided the Governor and Legislature with reports on investment needs in county, township, and tribal roads. However, no funding was provided for a study this biennium. With a growing and dynamic economy, it is important for the Governor and Legislature to have access to up-to-date information and forecasts of road conditions and investment needs when setting priorities.

Biennial Road and Bridge Investment Needs Report. If this program is funded as before, UGPTI will collect traffic and truck data in partnership with the NDDOT at more than 1,000 locations on county and local roads throughout the state each biennium; develop current estimates of the surface conditions of all paved county and local roads; develop updated forecasts of truck traffic resulting from economic activity in the state; and prepare reports and other information needed by the governor and legislature. If this request is funded, UGPTI will function as a center of expertise and a source of technical information on road and bridge investment needs. According to Federal Highway Administration, each dollar spent on roads, highways, and bridges returns more than \$5 in savings on vehicle maintenance and repairs; lower road, highway, and bridge maintenance costs; improved safety; and less fuel consumption and tailpipe emissions.¹

Asset Management. Capital investments in roads and bridges can be optimized through a timed sequence of preservation and maintenance activities. Without timely maintenance, roads may deteriorate more rapidly than anticipated. According to the several studies, \$1 spent on maintenance at the right time could save \$4 to \$5 in the future.² When properly implemented, asset management can provide better road service for longer periods of time. The ultimate vision is for all counties in the State to use the same system, which will generate consistent performance measures and allow UGPTI to develop comparable estimates of investment needs across jurisdictions. If each county develops its own asset management system and measures, the Governor and Legislature must compare requests from individual counties based on different

¹ Kahn, M. and D. Levinson. Fix It First, Expand It Second, Reward It Third: A New Strategy for America's Highways. The Brookings Institute, 2011.

² Ibid.

assumptions and metrics. If each county develops its own system, large-scale duplication will result and substantial resources will be wasted. Instead, with adequate funding, UGPTI can host an asset management system for the entire state as originally planned, and add functions over time to make it a decision-support tool similar to the one used by Federal Highway Administration. Appendix A covers the concept in greater detail and lays out the long-term vision.

Transformative Technologies and their Effects on Transportation Planning and Operations

Transportation (driven by advances in telecommunications and technology) is changing at a dramatic pace. Assisted driving and quasi- and fully-autonomous vehicles are only part of the wave of changes that will impact North Dakota in the future. Robotic freight yards, quasi- and fully-autonomous freight trains and commercial motor vehicles, and truck platooning are emerging realities. Connected vehicle (CV) technologies (in which vehicles communicate with each other and roadway devices) are operational and being tested in several states. In addition to offering great efficiencies and safety benefits, CVs generate massive amounts of data, such as location, speed, and vehicle performance. They generate so much data in fact that CVs pose opportunities and challenges in data analysis that have never been experienced. “Big data” will radically change the way transportation planning takes place in the future. “Smart vehicles” and “smart infrastructure” will provide capabilities only dreamed of a few years ago.

In this rapidly changing but opportunistic environment, North Dakota needs an objective entity such as UGPTI to provide assessments of the potential benefits and costs of various technologies and their potential impacts on the State. With the requested program, UGPTI could establish itself as a confidential data repository and analytical center where CV data can be confidentially assembled from many sources and harnessed under confidentiality agreements. In addition to benefiting transportation planning in a variety of ways, CV (and other futuristic) technologies will improve safety, reduce congestion and travel time by providing dynamic route information and better trip planning options for travelers, improve freight efficiency and reduce business logistics costs, and optimize the dispatching and routing of emergency vehicles. Harnessing these technologies to achieve the state’s goals is essential for growth and prosperity.

The requested program will create substantial **leveraging opportunities**. With a modest commitment from the state, matching and additional funds can be requested from private entities. Automobile manufacturers, individual developers of autonomous vehicles, and specialized technology companies already fund research and development at select universities in the United States. However, these companies would need to see an established program at UGPTI with some commitment of state resources before investing funds in a new research and technology transfer effort in North Dakota.

Requested Funding Levels

Request	General Funds Requested
Road and Bridge Planning Center	\$975,000
Transformative Technologies Program	\$500,000

Appendix A:

A Statewide Asset Management System for North Dakota: Detailed Prospectus

An asset management system is a tool that allows the monitoring and analysis of roads and bridges and enables the measurement of key performance indicators such as: (1) road surface condition, (2) the traffic levels (including freight traffic) supported by the roads, and (3) the geometric and structural features of road segments that impact their life expectancies and the levels of service they can provide. While the initial capital investment is a major consideration, an asset management system is focused on preserving the condition and capability of a road to provide good service for an economic period of time.

In asset management, the life-cycle cost of a road or bridge (including preventative maintenance treatments) is a key metric. After roads are constructed or reconstructed, an asset management system is focused on preserving them for as long as possible, in the most cost-effective manner possible. While life-cycle costs are a crucial barometer, the costs of travelers and trucking services are equally important. Ultimately, an asset management system provides decision makers with a better understanding of the effects of various investment options on vehicle operating costs and levels of service. As envisioned, UGPTI's asset management system will have several levels that (ideally) will be reached over time. The amount of funding that can be allocated to the effort will determine the pace in part.

- I. Inventory of Road and Bridge Assets.** Each major segment of a county road between two junctions is part of the inventory. For each segment, the following information will be compiled and updated biennially.
1. The length of the segment;
 2. The classification of the road (e.g., CMC or local);
 3. The number of lanes;
 4. The surface type (e.g., paved, graveled, or unimproved);
 5. The current or latest surface condition rating of paved road segments;
 6. The structural characteristics of the segment. (For paved roads, this includes information about the subbase and base layers in areas where field tests have been conducted.);
 7. The total traffic (average daily trips of all vehicles);
 8. Average daily truck trips (by type of truck, in many cases); and
 9. A history of improvements made to the road segment (e.g., the date of the last resurfacing or reconstruction improvement and the application of preservation/maintenance treatments).

The Geographic Roadway Inventory Tool or GRIT (which is already operational and in use by many counties in North Dakota) displays all of the above information in intuitive formats for county road managers. Moreover, GRIT provides online mapping tools that allow road managers to view the entire network, as well as individual segments. All of the data collected each year (or biennium) will be used to update the inventory, so that GRIT remains as current as possible.

In addition to providing counties with essential planning tools, the asset management system will provide consistent information across counties for the entire state. When all

counties are using the system, GRIT will provide comparable estimates of road conditions and traffic trends. In doing so, GRIT will be instrumental to the Legislature in monitoring the maintenance and potential life expectancies of the state's capital investments.

- II. Technology Deployment and Decision Tools.** In Level 2, many features will be added to improve the coverage and frequency of data collection and provide information that can be used to make investment decisions.
1. A cost-effective method of collecting road condition data in a continuous manner will be implemented in the near future by deploying smart phones and low-cost sensors in vehicles. Using this technology, the roughness of a road surface can be approximated by monitoring the motion, acceleration, and responses of vehicles as they travel across the road each day. Once it is effectively deployed, this new technology will allow road condition data to be collected every year on all segments in the state, not just on a sample of road segments. Moreover, the condition assessments will be consistent from county to county and from segment to segment.
 2. The Surface Selection Tool (which has already been developed) provides technical assistance in determining when an unpaved road could be economically paved, based on life-cycle cost comparisons of paved and unpaved roads.
 3. In the near future, a traffic/road condition forecasting model will be added to the asset management system, which will provide counties with the ability to estimate future rates of road deterioration (based on projected traffic levels) and the timing of future improvement needs. When Level 2 is implemented, counties will be able to simulate the effects of economic developments that hopefully will occur in the future—e.g., a new processing plant may be opened that increases truck traffic on certain road segments, a quarry may be expanded, etc.
 4. A gravel road component will be added which provides important information on graveling frequency and depth and other costs (such as blading frequency), which vary with levels of truck traffic.
- III. Improvement Selection Tools.** When added to the GRIT and Level 2 models, Level 3 tools will provide technical information regarding the many types of improvements that could be considered for a road segment in the future. For paved roads, these options may include a range of improvement types, such as a thin overlay, a structural overlay, rehabilitation, shoulder improvements, etc. For unpaved roads, the improvement selection tools will be similar to those that are now available for federal and state highways. For unpaved roads, the tools will consider various frequencies of blading, graveling, and gravel depth.
- IV. Budgeting/Benefit-Cost Tools.** UGPTI's road cost tool will allow counties to forecast the costs of maintaining and improving their road networks in the future. It will include a state-of-the-art unpaved road cost model, as well as a paved road cost model that includes overlay and preventative maintenance costs. The costs of operating vehicles over the roads will be estimated based on roughness, speed, and other factors. The benefit/cost (B/C) tool will provide comparisons of the relative benefits of investing in certain road segments at certain times. It will also generate information that could be used to justify federal infrastructure

investments, if those funds become available in the future. The B/C tools will help road managers prioritize investments in times of limited funds.

Consistency and Multicounty Planning. In summary, some of the major benefits of continuing to develop the asset management system are that it will: (1) provide consistent performance measures across counties; (2) facilitate multicounty planning and coordination (because all counties will have consistent information), (3) provide the most benefits for a given investment level, and (4) provide valuable tools that quickly and effectively help road managers visual system condition and performance and its effects on mobility within the county.



An international center for meeting and learning about northern grown crops of the United States

June 25, 2018

State Board of Higher Education

The Northern Crops Institutes mission is to support regional agriculture and value added processing by conducting educational and technical programs that expand and maintain domestic and international markets for northern grown crops

The Northern Crops Institute continues to carry out this mission on a daily basis, and continues to strive for areas to help our regional producers, processors, and citizens grow markets, jobs, and opportunities both overseas, as well as domestically.

While we continue to pursue other avenues of funding as we add value back to the community, we would ask that this effort is not slowed by the suggested budget cuts.

Northern Crops Institute requests the following items in the 2019-2021 Legislative Session:

Optional restoration of 5% Budget reduction -- \$94,345

Optional restoration of 5% Special Funds reduction -- \$87,792

Optional restoration of 3% contingency reduction -- \$56,607

We are grateful for all of the support you have given the Northern Crops Institute over the years.

Respectfully,

A handwritten signature in black ink, appearing to read 'Mark Jirik', is written over a light blue horizontal line.

Mark Jirik
Director
Northern Crops Institute

TO: Members, State Board of Higher Education
FROM: Mark Hagerott, Chancellor
DATE: June 19, 2018
RE: 2018-19 Annual Budget for NDUS Office and Board

The FY19 annual budget (**ATTACHMENT 1**) was developed in accordance with the guidelines approved by the SBHE on 3/28/2018. The \$71.4 million proposed budget is a \$11 million increase from the FY18 expected expenditures. Of this increase, \$8 million relates to Core Technology Services(CTS) due to conservative spending and not filling some vacant positions in FY18, as well as large projects that will be initiated in FY19 that will require increases in their budget. The FY19 annual budget is funded with \$58.9 million from the state general fund and \$12.4 million in special funds.

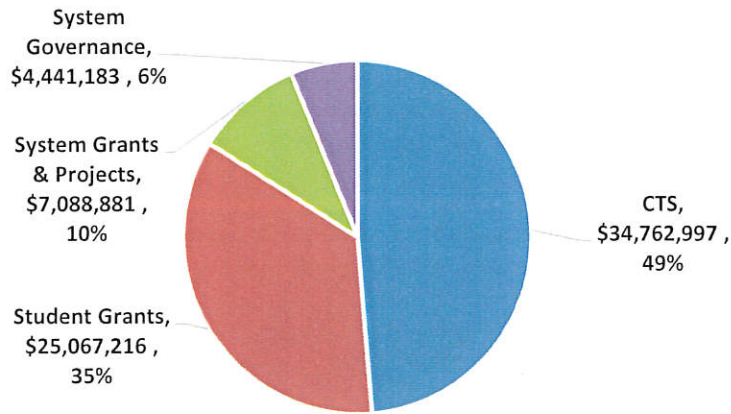
Connect ND fees, which support the CTS budget, comprise the majority (\$11.5 M) of special funds. Campus assessments and group billings (**ATTACHMENT 2**), Student and System Grant Programs and System Projects make up the remaining special fund budget.

This proposal includes a \$90,000 budget (**ATTACHMENT 3**) for SBHE operations, which is the same level as FY18. The amount provides for per diem and travel expenses for board members.

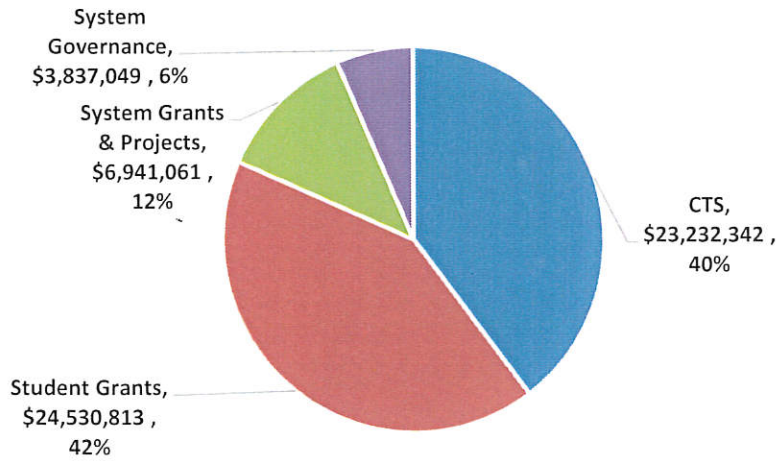
PROPOSED SBHE MOTIONS: In accordance with SBHE policy 802.6 (g) which requires the “SBHE shall approve the Board and system office annual operating budgets,” and SBHE policy 302.3 which requires SBHE approval of “proposed campus assessments exceeding \$10,000”, the FY19 NDUS Office and board budgets and anticipated campus assessments/billings are approved as proposed.

The major components of the budget are:

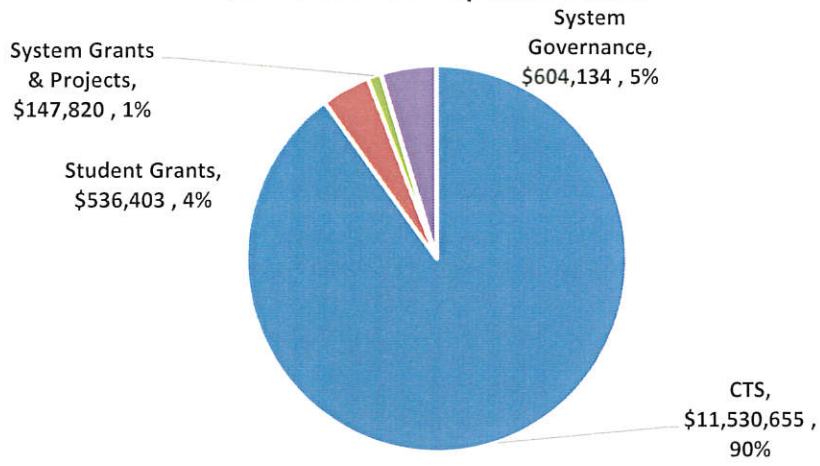
FY19 Annual Budget
\$71.4 million - all funds



FY19 Annual Budget
\$58.5 million - general fund



FY19 Annual Budget
\$12.8 million - special funds



System Office and Board Operations

System Governance – The FY19 annual budget anticipates expending \$4.1 million of the \$8.4 million 2017-19 appropriation. The System Governance budget includes the operations of the SBHE, NDUS office, Internal Audit, and Compliance departments. Significant items planned for FY19 include:

- In accordance with the annual budget guidelines, employees will not receive general salary increases.
- The Chief of Staff and one Administrative Support position may remain vacant.
- The intention is to appoint Darin King as permanent Vice Chancellor for Information Technology and to conduct a search for a permanent Vice Chancellor for Strategy.
- The budget assumes continuation of all other positions.
- In recognition of exceptional performance in the last year while responding to increased workload and budget reductions, all employees, except Senior Staff members, will receive 1% salary increases. Additionally, a few responsibility and reclassification adjustments will be provided to reflect significant changes in job duties. In addition to salary vacancy dollars, operating budgets will be adjusted as necessary to fund the increases.
- All System Office employees, except for Senior Staff members, will receive one-time performance bonuses. 2015-17 carryover dollars will be utilized.
- **SBHE Operations** – The proposed FY19 budget for Board operations is \$90,000, the same as FY18. Historically board expenditures average about \$72,000. The budget is comprised of:
 - Per diem pay and travel expenses for members to attend board, committee and legislative meetings, as well as professional development and conference travel;
 - Travel expenses only for the student member, who receives a tuition and fee waiver for during the SBHE service term; and,
 - \$4,500 each for the campuses of the faculty and staff advisors to cover release time, compensation or other accommodations necessary for time spent on SBHE duties.

Anticipated Carryover - \$592,553 of funds not expended in the 2015-17 biennium were carried forward to the 2017-19 biennium. The majority of the carryover dollars resulted from vacant positions not filled in anticipation of the budget cuts and across-the-board reductions in professional development, travel and other operating expenses.

\$253,308 of these carryover dollars are expected to be expended in FY18, largely for one time contracts including a financial aid program system for the Academic and CTE scholarships. The remaining \$339,245 is available for the FY19 budget. These **one-time** funds can be used for strategic engagement services or to cover other unanticipated expenses.

Student Grant Programs

Highlights of the individual programs include the following:

State Grant Program – The ND Legislature appropriated \$21.9 million (a decrease of \$2.0 million) for the ND need-based state grant program. Individual awards may not exceed \$975 per semester or \$650 per quarter. Students are limited to 8 semesters or 12 quarters of eligibility based on full-time enrollment. Approximately 7,000 full and part-time students will be funded per year in the 2017-19 biennium.

ND Scholars – Appropriated funds total \$1.8 million for the 2017-19 biennium, a decrease of \$306,469. This funding and approximately \$260,000 carryover will allow the continuation of all upper-classmen, plus approximately 35 new freshmen per year.

ND Indian Scholarship Program – Appropriated funds total \$561,134 for this scholarship program. The program provides merit or need-based awards not to exceed \$2,000 per academic year to eligible students. The ND Indian Scholarship Board administers the program and establishes annual award levels. Approximately 240 undergraduate and 20 graduate awards are made each year.

ND Academic Scholarship & ND Career and Technical Education Scholarship – The 2017-19 appropriation for the ND scholarships is \$12,016,749, a decrease of \$1,117,347. Available funding, including \$3.4 million in carryover from 2015-17, will provide funding to maintain the scholarship at \$750 per semester or \$500 per quarter for the current cohorts for 4 full years (8 semesters or 12 quarters). Additionally, the appropriated funds will provide an estimated 1,500 new students per year a scholarship. The maximum lifetime award per student is \$6,000.

PSEP - The \$3,699,342 million appropriation and approximately \$770,000 carryover from 2015-17, will continue to fund the current students in WICHE, Iowa State, University of MN and Kansas State. The estimated new slots per year are 7 dentistry, 6 optometry and 11 veterinary medicine.

Education Incentive Program – Appropriated funding of \$2,869,269, provides support to the Teacher Shortage Loan Forgiveness Program (TSLF), the STEM Occupation Loan Forgiveness Program and doctoral program funding at NDSU and UND. In accordance with SB2037, \$500,000 is allocated to STEM awards, while \$2,103,393 will go to teacher shortage awards. Due to statutory program changes, TSLF dollars will only be expended in FY19. Additionally, the doctoral programs at UND and NDSU will each receive \$130,000 for the biennium to promote doctoral program advancement at these schools.

Tribal Community College Grants – This program provides supplemental grant assistance to tribal colleges in North Dakota for non-beneficiary student enrollment. The 2017-19 appropriation is \$600,000.

System Grant Programs and System Projects

The Legislature appropriated the following funds for 2017-19 as follows:

- Veterans assistance grants - \$277,875: The appropriation was transferred in FY18 to NDSU in support of their Veteran's Bound program which serves the whole System. All of this appropriation is expected to be expended in FY18.
- Internal Audit Pool : This appropriation line was eliminated in the 2017-19 legislative session and \$229,500 transferred to System Governance for internal audit functions.
- ND Higher Education Challenge Fund – \$2,000,000: The 2017-19 appropriation is \$2,000,000 from the general fund.
- Capital Bond Payments - \$6,605,326: This budget is based solely upon estimates provided by the Industrial Commission. FY18 and FY19 bond payments are budgeted at \$3,216,017 and \$3,389,309 respectively.
- EPSCoR - \$6,027,750: This appropriation was reduced by \$1,022,250 from the 2015-17 biennium. EPSCoR funds are used to match National Science Foundation grants at UND and NDSU. The funds are budgeted at \$3,013,875 for each year of the biennium.
- Title II Grant- \$1,006,472: This competitive federal grant, which provides services to K-12 teachers for improving the teaching-learning process in math and science, was discontinued. No state general fund dollars are utilized. The total amount available for the 2017-19 biennium is \$231,128 and is expected to be fully expended in FY18.
- Student Mental Health - \$348,400: This appropriation includes \$284,400 from the general fund and special funds of \$64,000 for campus staff training. This program provides after-hours crisis intervention and psychiatric service for students.
- Core Technology Services - \$61,527,347: This appropriation includes \$37,964,115 from the general fund and \$23,563,232 of special fund authority. Core Technology Services supports the continued operations of PeopleSoft, ancillary, document imaging and data center systems for campuses, continued implementation of PAR, Starfish, Standard Application, Email Consolidation/Archiving, Identity Access Management, and security.

Attachments (3)

**NORTH DAKOTA UNIVERSITY SYSTEM OFFICE
ESTIMATED 2018-19 ANNUAL BUDGET**

	2016-17 Actuals	2017-18 Estimated Expenditures	2018- 19 Estimated Budget	Incr (Decr) from 2017-18	
				\$ change	% change
2018-2019 All funds					
System Governance:					
Salary, FB and Operations	3,543,775	3,977,914	4,101,938	124,024	3.1%
Prior Biennium Carry Over	259,014	253,308	339,245	85,937	33.9%
Subtotal all funds	3,802,789	4,231,222	4,441,183	209,961	5.0%
Less estimated income	55,749	549,331	604,134	54,803	10.0%
Subtotal general fund appropriation	3,747,040	3,681,891	3,837,049	155,158	4.2%
Student Grant Programs:					
Student Financial Assistance Grants	11,004,154	10,124,213	11,600,000	1,475,787	14.6%
Scholars Program	1,015,759	856,923	925,845	68,923	8.0%
ND Indian Scholarship Program	311,611	288,080	273,500	(14,580)	-5.1%
Professional Student Exchange Program *	1,811,822	1,782,096	1,661,866	(120,230)	-6.7%
Education Incentive Programs	1,577,037	395,160	1,769,000	1,373,840	347.7%
Academic and Technical Education Scholarships	6,434,969	7,303,000	7,660,619	357,619	4.9%
Tribal Community College Grants *	477,375	300,000	300,000	0	0.0%
ND Higher Education Challenge Fund (HB1151)	8,008,653	1,123,614	876,386	(247,228)	-22.0%
Veterans Assistance Program	0	277,875	0	(277,875)	-100.0%
Subtotal all funds	30,641,379	22,450,961	25,067,216	2,616,256	11.7%
Less estimated income	103,848	428,904	536,403	107,499	25.1%
Subtotal general fund appropriation	30,537,531	22,022,057	24,530,813	2,508,757	11.4%
System Grant Programs:					
EPSCoR	3,063,225	3,013,875	3,013,875	0	0.0%
Title II Grant **	265,311	231,128	0	(231,128)	-100.0%
Student Mental Health	262,076	164,000	225,877	61,877	37.7%
Open Educational Resources Initiative	44,531	0	0	0	0.0%
Internal Audit Pool	175,899	0	0	0	0.0%
Faculty Commendatory Grants (HB1201)	4,031	0	0	0	0.0%
Deferred Maintenance Pool	2,296,368	0	0	0	0.0%
Subtotal all funds	6,111,442	3,409,003	3,239,752	(169,251)	-5.0%
Less estimated income	32,000	32,000	32,000	0	0.0%
Subtotal general fund appropriation	6,079,442	3,377,003	3,207,752	(169,251)	-5.0%
System Projects:					
Core Technology Services *	27,670,505	26,764,350	34,762,997	7,998,647	29.9%
Pilot Study-Dual-Credit HB2244*	0	84,180	115,820	31,640	37.6%
Shared Campus Services	0	156,000	344,000	188,000	120.5%
Two-Year Campus Study	0	40,000	0	(40,000)	-100.0%
Two-year Campus Marketing	448,138	0	0	0	0.0%
Capital Assets-Bond Payments	2,406,216	3,216,017	3,389,309	173,291	5.4%
Subtotal all funds	30,524,859	30,260,547	38,612,126	8,351,578	27.6%
Less estimated income	7,920,721	8,748,685	11,646,475	2,897,790	33.1%
Subtotal general fund appropriation	22,604,138	21,511,862	26,965,651	5,453,788	25.4%
TOTAL					
Total all funds	71,080,469	60,351,733	71,360,277	11,008,544	18.2%
Less estimated income*	8,112,318	9,758,920	12,819,012	3,060,092	31.4%
Total general fund appropriation	62,968,150	50,592,813	58,541,265	7,948,452	15.7%

* Contains Student Loan Trust Fund Dollars

ATTACHMENT 2

2017-19 Proposed Campus Assessments & Group Billings

	FY2018 Budget	FY2019 Budget	2017-19 Budget
Internal Audit	\$ 39,168	\$ 10,603	\$ 49,771
Compliance Function	\$ 135,317	\$ 135,317	\$ 270,634
Campus Group Billings			
Controllers Group- Training	\$ 12,000	\$ 12,000	\$ 24,000
CUPA HR Subscription	\$ 15,500	\$ 15,500	\$ 31,000
Economic Impact Study	\$ -	\$ 17,600	\$ 17,600
Title IX Training	\$ 32,000	\$ 32,000	\$ 64,000
Fraud Hotline - Eide Bailly	\$ 3,000	\$ 3,000	\$ 6,000
Total Proposed Assessments & Group Billings	\$ 236,985	\$ 226,020	\$ 463,005

SBIHE Policy 302.3 revised 10/27/2016 requires Budget & Finance Committee approval of proposed campus assessments exceeding \$10,000.

ATTACHMENT 3

2018- 19 Proposed SBHE Budget

	2018-2019 Proposed Budget			
	Per Diem @ \$148		Travel	Total
	# days	amount	amount	Budget
SBHE Members				
SBHE President	37	\$ 5,600	\$ 6,100	\$ 11,700
SBHE Vice President	37	5,600	6,100	11,700
SBHE Board Member	31	4,600	4,900	9,500
SBHE Board Member	31	4,600	4,900	9,500
SBHE Board Member	31	4,600	4,900	9,500
SBHE Board Member	31	4,600	4,900	9,500
SBHE Board Member	31	4,600	4,900	9,500
Pool	8	1,100	1,500	2,600
	237	35,300	38,200	73,500
 SBHE Student Member	 33		 2,300	 2,300
 SBHE Staff Advisor	 33	 4,500	 2,600	 7,100
 SBHE Faculty Advisor	 33	 4,500	 2,600	 7,100
 TOTAL		 \$44,300	 \$45,700	 \$90,000

Summary of Proposed Action SBHE Meeting, June 28, 2018

1. **Issue:** LRSC is requesting an appropriations line item transfer from operations to capital assets, to fund a portion of the 2:1 matching requirement for 2017-19 extraordinary repairs.
2. **Proposed actions:** Approve the transfer of \$23,000 from the LRSC operations line to the capital assets line, as authorized in SB2003 (Section 20), for the 2017-19 biennium. LRSC will use these funds to complete miscellaneous building repair projects.
3. **Background information:** Section 28 of SB2003 states, "The capital assets line items in subdivisions 2 through 12 of section 1 of this Act include funding from the general fund for institution extraordinary repairs. An institution shall provide two dollars of matching funds from operations or other sources for each one dollar of extraordinary repairs funding used for a project."

The LRSC appropriation included a total of \$155,367 from the general fund intended for extraordinary repair projects, requiring a \$310,734 match from other funding sources.

4. **Financial implications:** The match requirement will reduce funds that would have otherwise been available for operating funds. LRSC carefully reviewed individual department budgets (both personnel and operations) and determined this transfer was appropriate.
5. **Legal/policy issues:** The transfer is allowed in Section 20 of SB2003.
6. **Academic issues:** None
7. **Coordination:** Chancellor's Cabinet, SBHE Budget Finance Committee
8. **Attachments:** None
9. **Contact information:** Corry G. Kenner, VP Administrative Affairs Corry.Kenner@lrsc.edu Tammy Dolan, 701-328-4116, tammy.dolan@ndus.edu
10. **Chancellor's recommendation:** Recommend approval

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10. **Chancellor's recommendation:** Recommend approval

Summary of Proposed Action SBHE Meeting – June 28, 2018

1. **Issue:** To allow for UND and the community to host events and contests at the High Performance Center, a seating and storage area must be constructed. The work and cost being approved is for construction only. Future assembly of the seating equipment has been included in the budget at an estimated value of \$500,000. UND will update the board should this amount vary significantly from the estimate.
2. **Proposed motion:** Authorize UND to proceed with the [High Performance Center](#) (HPC) seating and storage project with estimated construction costs of \$695,000 to be funded by UND Alumni Association and Foundation donations.
3. **Background:** This project was identified as a need during the construction of HPC and was identified as a priority for fundraising efforts. The seating and storage project is consistent with the campus master plan and UND Athletics master plan.
4. **Financial implications:** Funds for this project are derived from UND Alumni Association and Foundation donations. Funds are sufficient and available for this project.
5. **Academic implications:** There are no academic implications related to this project.
6. **Legal/policy issues:** There are no legal/policy issues related to this project.
7. **Review Process:** Tonder
8. **Enclosures:** SBHE agenda item
9. **Contact person:** Alice Brekke, vice president for finance and operations, alice.brekke@und.edu, 701-777-3511
10. **Chancellor's Recommendation:** Chancellor Hagerott recommends approval.

University of North Dakota June 28, 2018

Authorize UND to proceed with the High Performance Center (HPC) seating and storage project with estimated construction costs of \$695,000 to be funded by UND Alumni Association and Foundation donations.

Project Description: This construction project features the creation of a concrete masonry block and pre-cast concrete structure to provide HPC with storage areas, an elevated seating structure and a concourse area.

Consistency with Campus Facility Master Plan and Budget: This project was identified as a need during the construction of HPC and was identified as a priority for fundraising efforts. The seating and storage project is consistent with the campus master plan and UND Athletics master plan.

SBHE and/or Legislative History: This is a new project with no prior SBHE or legislative history. It was originally slated to be included in the initial construction of HPC; however, funding was not available at the time to do so.

Estimated Total Purchased or Donated Costs: \$745,000

	Amount
Planning, Permits and Insurance (design costs associated with current project, OMB preplanning revolving funds, architect and engineer fees, permits, insurance)	\$27,000
Land/Building Preparation and Purchase or Donated Costs (land acquisition and site preparation/development)	\$0
Demolition and Disposal	\$0
Construction (foundation and building construction or renovation, including fixed equipment, landscape, infrastructure and utilities, mechanical and electrical, parking and driveways or roadways)	\$661,000
Institutional work (value of work completed by institutional trade staff)	\$2,000
Contingency	\$5,000
Hazardous Material Abatement	\$0
Other, including third party costs (please describe)	\$0
SUBTOTAL (if total exceeds \$250,000, requires SBHE approval)	\$695,000
Furniture, Fixture and Equipment (FF&E)	\$500,000
TOTAL	\$1,195,000

No other work, other than that specified within this request, is required for the completion of the project nor is other work planned to supplement this project using funding or authority not included within this request

Future Operating/Improvement Costs and Funding Sources: The project will result in negligible increases in maintenance and operations costs. Operating and improvement costs for the seating and storage area will be sourced from the current operating budget assigned to UND Athletics.

Source and Availability of Funds (including FF&E): Funds for this project are derived from UND Alumni Association and Foundation donations. Funds are sufficient and available for this project.

Estimated FF&E NOT reported above (information only): \$0.00

Project Management Oversight (consistent with 9/25/13 SBHE approved guidelines): UND will retain a general contractor which will reduce overall project management requirements. The UND Associate Director for Construction Management has significant project management experience and together with the general contractor and project architect, will ensure project management needs are met.

Estimated Project Timeline and Completion Date: Construction is scheduled to commence in July/August 2018 with completion slated for the end of December 2018.

Summary of Proposed Action SBHE Meeting – June 28, 2018

- 1. Issue:** Current student success and collaboration spaces at UND are limited. Repurposing current space as a student engagement center will result in the reuse of existing square feet and will significantly reduce deferred maintenance.
- 2. Proposed motion:** Authorize UND to proceed with the [repurposing of the J. Lloyd Stone House](#) (to be used as a student engagement center) at an estimated cost of \$4,500,000 to be funded by \$3,000,000 in donations from UND Alumni Association and Foundation and \$1,500,000 in Challenge Grant funding.
- 3. Background:** Research has shown that student engagement has a positive impact on student success (for example, degree completion). This project includes the renovation/restoration of the J. Lloyd Stone House to accommodate student engagement space, student gathering space, student related event space and potentially corresponding office space. This project coincides with the goals of the 2016 and 2018 UND Campus Facility Master Plans. Moreover, repurposing the historically significant J. Lloyd Stone House as a student engagement center will result in the reuse of 8,222 of existing square feet and will eliminate an estimated \$1,326,686 in deferred maintenance.

In 2014, SBHE authorized UND to raise funds of up to \$6 million to support the expansion of space available and tailored to enhance student engagement. A \$1,500,000 North Dakota Challenge Grant was reviewed and approved by the match committee on October 8, 2014. This authorization was prior to a change in North Dakota Century Code section 15-10-53 that excludes campus facility repair projects and new capital construction projects from challenge grant funding. In 2015, North Dakota's Legislative Assembly approved \$6 million for student engagement projects.

- 4. Financial implications:** All costs for this project will be funded by UND Alumni Association and Foundation and a Challenge Grant, and are sufficient and available for the project. Its project costs are below the amount previously authorized by SBHE and the legislature.
- 5. Academic implications:** There are no academic implications related to this project.
- 6. Legal/policy issues:** None
- 7. Review Process:** Reviewed by Rick Tonder
- 8. Enclosures:** SBHE agenda item
- 9. Contact person:** Alice Brekke, VP for finance and operations, alice.brekke@UND.edu, 701-777-3511
- 10. Chancellor's Recommendation:** Chancellor Hagerott recommends approval.

North Dakota State University, June 28, 2018

Authorize NDSU to enter into a **Purchase and Sale Contract** with Burlington Northern Santa Fe (BNSF) Railway Company, a Delaware corporation, for land located near the NDSU campus in the amount of \$56,500.

Background Information

Burlington Northern Santa Fe Railway Company (BNSF) approached NDSU to acquire a section of land adjacent to BNSF property for the purpose of constructing a fueling station. The land has been/is currently used as agricultural research land for animal research efforts by the Agricultural Experiment Station scientists in the NDSU Department of Animal Sciences.

The transfer of land was approved by the Sixty-fifth Legislative Assembly, with authorization included in Section 29 of SB2003, and subject to final approval by the SBHE and the commissioner of university and school lands. To facilitate transfer of land, NDSU and BNSF agreed to establish an easement/right-of-way which allowed BNSF to enter the land and begin limited site work for the purpose of designing the improvements for the intended use as a fueling station. The easement does not guarantee that the land will be transferred, and includes provisions for restoring the property should the transfer not occur. This easement was authorized by the SBHE at its September 28, 2017 meeting.

NDSU is now preparing to transfer this parcel of land (~0.86± acres) located in the SW¼ of Section 35, Township 140 North, Range 49 West, Cass County, North Dakota, to BNSF. This will be by conveyance of a quitclaim deed to satisfy the requirements of N.D.C.C. 54-01-05.1 and SBHE Policy 910 Transfer of Real Property, as well as the recommendation made by the Commissioner of the ND Department of Trust Lands. As per SBHE Policy 910, the Department of Trust Lands also reviewed its land records for the tract and determined that “the tract was never classified as school lands that are original grant land”.

Therefore, NDSU is requesting authorization to enter into the attached Purchase and Sale Contract, Unimproved Property at the market price of \$56,500 for the tract of land stated above. The purchase price was established by an independent appraisal to be \$37,492.

Consistency with Campus Facility Master Plan and Budget

The land sale is not part of the NDSU Campus Facility Master Plan.

SBHE History

September 28, 2017: SBHE authorized NDSU to provide BNSF with an easement and right-of-way for a tract of land lying in the Southwest Quarter of Section 35, Township 140 North, Range 49 West of the 5th Principal Meridian. The SBHE further authorized the Chancellor to determine jointly with the commissioner of university and school lands, the terms of conveyance as per SB 2003, prior to final approval by the Board.

Legislative History

SB2003 of the Sixty-fifth Legislative Assembly, **Section 29. Transfer of Land Authorized** states:

The state of North Dakota, by and through the state board of higher education, shall convey certain real property consisting of approximately 0.8 acres parallel and adjacent to the BNSF railway company right-of-way in Cass County, North Dakota, known as parcel number 01-3504-08500-000 in the records of Cass County, North Dakota, to BNSF railway company, if determined appropriate by the state board of higher education and the commissioner of university and school lands. The terms of the conveyance must be determined jointly by the state board of higher education or a designee of the board and the commissioner of university and school lands. North Dakota Century Code sections 54-01-05.2 and 54-01-05.5 do not apply to the transfer authorized by this section.

Attached are the Quitclaim Deed and Purchase and Sales Contract for this transaction.

ND Higher Education Challenge Fund Meeting

October 8, 2014 – 9:30 a.m.

BSC – Horizon Conference Room

Conference Call in Number: (701) 328-1601 Participant Passcode: 56262#

Present: Lieutenant Governor Drew Wrigley, Representative Bob Martinson, Rick Burgum, Connie Nicholas, Senator Karen Krebsbach, Terry Hjelmstad

The Lt. Gov. called the meeting to order at 9:34 a.m.

Meeting Minutes Review

The Lt. Gov. asked committee members, presidents, and foundation directors if there were any questions about the meeting minutes from Aug. 20, 2014. Representative Bob Martinson moved for approval of the minutes, Rick Burgum seconded.

President Robert Kelley (UND) requested that the state match awarded to UND on Aug. 20 for the Aerospace/UAS Research Building be changed from \$100,000 to \$1,000,000 to reflect the actual award amount. This change was accepted by the committee.

Motion carried.

Committee Business

Date Change

Ashley Portra announced that the November committee meeting date had been changed to Nov. 17, 2014 at 1 p.m. Location would be designated at a later date. Applications would then be due on Nov. 10, 2014, at 5 p.m.

Summary of Distributed Funds to Date

Rep. Martinson suggested that committee members, presidents, and foundation directors review the Summary of Distributed Funds to Date and Summary of Scope Approved to Date on their own to save time during the meeting. The Lt. Gov. asked the committee if there were any objections to this suggestion and there were none.

Scope Approval

Mayville State University

President Gary Hagen presented a scope application for the Larson Leadership Program. The program is designed on four levels – interest, awareness, exploration, and demonstration. It would integrate leadership learning experiences into student coursework from freshman to senior year.

The Lt. Gov. asked what state match funds would pay for in this program. Pres. Hagen explained that state match funds awarded would pay for faculty salary, guest speakers, seminars, volunteers, internships, and other opportunities that would be worked into the curriculum.

The Lt. Gov. said that although he planned to vote for approval of the program, he would ask that their application for funding of the Larson Leadership Program be more specific in the future. Connie Nicholas moved to approve the scope application, Rep. Martinson seconded. Motion carried.

North Dakota State College of Science

President John Richman presented seven scope applications to the committee. He gave a brief description of each application. The Lt. Gov. asked committee members for their thoughts on the North Dakota Automobile and Implement Dealer's Scholarship and Training Fund. He noted that in the Description of Project, "special costs relating to recruiting and marketing" was listed. Burgum stated that he believed the committee would be stretching the Challenge Fund guidelines if they were to consider awarding state match funds for marketing costs of a proposed program. Nicholas agreed with this opinion.

Brad Barth, NDSCS Foundation Director, said that previous NDSCS scope applications had been approved with similar program descriptions. He noted that the school has plenty of funding for scholarships but they are having difficulty getting students to enroll in some programs. They have open seats. Barth said they need money to support an awareness campaign.

The Lt. Gov. couldn't remember any occasions in which the committee had approved scope applications that included recruiting or marketing costs. He reminded the committee members, presidents, and foundation directors that approved scope applications are not a promise for future funding. They are merely meant to be used as a guideline in the state match funding application process.

Rep. Martinson moved to approve all seven scope applications with the exclusion of any marketing, recruiting and career awareness features, Nicholas seconded. Motion carried.

Application for Funding

North Dakota State University

President Dean Bresciani presented four applications for endowed scholarships. He briefly explained each application. Burgum stated that he wished to abstain from voting on the NDSU Center for Risk and Trading because his company is involved in the project. Nicholas also expressed her desire to abstain because she and her husband are invested in the project. Rep. Martinson moved to approve all four applications.

The Lt. Gov. suggested the application for the NDSU Center for Risk and Trading be tabled until the Nov. 17 meeting because there weren't enough committee members to vote on it after Burgum and Nicholas's abstentions. Pres. Bresciani accepted that solution.

Rep. Martinson withdrew his previous motion and moved to approve the other three applications, Nicholas seconded. Motion carried.

Mayville State University

Pres. Hagen reiterated his scope presentation for the Larson Leadership Program funding application. Nicholas moved to approve the application, Burgum seconded. Motion carried.

Pres. Hagen presented an application for the RN to BSN Online Degree Program. Rep. Martinson asked what state match funds would be used for with this program. Pres. Hagen said the funds would be used to create the program, its infrastructure on campus and to pay staff. Rep. Martinson was concerned that if this application were approved, state match funds would be paying for educational basics that the school should be covering.

Senator Karen Krebsbach was concerned MSU's graduation goal of 96 students for next year is lofty. Pres. Hagen said he didn't think so. MSU has already graduated 20 students from the program this year.

The Lt. Gov. stated that the committee wanted to make sure there will not be any marketing costs covered by state match dollars, should the application be approved. MSU Foundation Director John Klocke said that marketing was not included in this application or in the plans for the program.

The Lt. Gov. asked what portion of the state match funds requested would be utilized for student scholarships. Pres. Hagen said \$10,000 would be put toward scholarships.

The Lt. Gov. requested a more detailed description, an itemization of sorts, of what state match funds would be used for in this program. Klocke reiterated that the money would be utilized for the development of educational infrastructure and scholarships. He added that they believe this program is and will continue to be in high demand.

Burgum moved to approve, Terry Hjelmstad seconded. Rep. Martinson voted against the motion but the motion was carried.

Williston State College

President Raymond Nadolny noted that WSC had two applications for state match funds. He then introduced Deanette Pisek to present an application for the TrainND – Workforce Training Center. The Lt. Gov. asked Pisek to clarify how much WSC had raised in donations for the center. Pisek confirmed that they had secured \$656,000 and were requesting \$328,000 in state match funds. Burgum moved to approve both applications submitted by WSC, Nicholas seconded. Motion carried.

Dickinson State University

President D.C. Coston presented eight applications, briefly explaining each, and asked if there were any questions. The Lt. Gov. raised his concern about state match funds being used for marketing purposes to "retain" students as part of the Rose Enschenko and Family Scholarship Fund. Pres. Coston said that student organizations are

important to the university experience. He added that retention would come in the form of scholarships for students.

Burgum also expressed concerned about approving the application. He believed that approving this application would be moving further away from the true mission of the Challenge Fund grant program. Pres. Coston reassured the committee that any state match funds approved for this application would be used for student scholarships relating to specific fields of study or specific, extracurricular organizations.

Burgum moved to approve all eight applications, Nicholas seconded.

Sen. Krebsbach asked if the committee should be concerned about the word “recruitment” being used in a number of DSU’s applications. Pres. Coston clarified that DSU uses the word “recruitment” to describe scholarships for incoming freshmen.

Motion carried.

North Dakota State College of Science

Pres. Richman presented five applications, describing each to the committee briefly. The Lt. Gov. asked if the NDSCS Leadership Program would be credit-based. Pres. Richman confirmed that it would be a credit-based, extra opportunity for select students.

The Lt. Gov. asked if the language regarding “targeted marketing” in the Construction and Design Technology Endowment could be easily removed. Pres. Richman said that it could. The Lt. Gov. requested that NDSCS remove this application, rework it, and resubmit it at a later date. Pres. Richman agreed to do so.

Sen. Krebsbach moved to approve all applications excluding the Construction and Design Technology Endowment, Burgum seconded. Motion carried.

Dakota College at Bottineau

Dean Ken Grosz presented an application for the Endowed Scholarship Program and described it briefly. The program would be established to provide students with scholarships. Rep. Martinson moved for approval, Burgum seconded. Motion carried.

Bismarck State College

President Dave Clark presented 10 applications for endowed scholarships. Rep. Martinson moved for approval of all 10 applications, Burgum seconded. Foundation Director Gordon Binek noted that BSC does have both donor signatures for the Myron and Marjory Atkinson Scholarship Fund. The updated document would be submitted to the committee. Motion carried.

University of North Dakota

Pres. Kelley presented three applications briefly – he described each as bricks and mortar projects. He also noted that the Student Academic and Engagement Center

would be a building project with educational purpose. Rep. Martinson moved to pass all three applications, Burgum seconded. Motion carried.

Lake Region State College

President Doug Darling presented two applications for funding. He clarified that LRSC would not need budget section approval for the Technical Center Campaign, a question the committee had posed at the Aug. 20, 2014 meeting, when LRSC submitted their first application for the center. Pres. Darling had already provided that information to both Portra and Kayla Effertz prior to the Oct. 8 meeting. Nicholas expressed her desire to abstain from the vote on the Technical Center Campaign as she is involved in the project. Burgum moved for approval of both applications, Rep. Martinson seconded. Motion carried.

The Lt. Gov. reminded the committee, presidents, and foundation directors to make note of the Nov. meeting date, as it has changed. Sen. Krebsbach stated that she will be traveling on Nov. 17 and will most likely not be available to phone in.

Sen. Krebsbach also asked if current scope approvals would expire on Dec. 31, 2014. The Lt. Gov. said that he didn't believe scope approvals would expire but also reminded the schools that having scope approval for a project does not guarantee that state match funds will be awarded for that project before or after Dec. 31, 2014.

Barth asked if projects that have already been approved and are continually raising funds would be eligible for the extra money pool after Dec. 31, 2014. The Lt. Gov. said that question would have to be addressed legislatively.

DeAnna Carlson Zinc (UND) asked if funding applications submitted after Dec. 17 would be put toward the schools own pool and the Lt. Gov. confirmed that they would. The first half of the Jan. 5, 2015 meeting would be devoted to those applications.

Meeting adjourned at 11:19 a.m.

University of North Dakota

Proposal for adjusted residency factors for Aviation

Based on the Tuition Model Principles approved by the SBHE on October 27, 2016, UND is requesting modification of the Other out-of-state US residents and the International students factors for the Aviation Programs listed below. UND believes this request falls within the principles described, specifically principle number 4. (Exhibit A).

Aviation

UND is proposing new factors for non-resident and International students as indicated in the table below:

	New Factor	New Rate/credit	New Rate/Year Proposed
North Dakota	1.00	\$328.98	\$7,896
Minnesota	1.12	\$368.46	\$8,843
Non-Resident	3.00	\$986.94	\$23,687
International	3.50	\$1,151.43	\$27,634

The adjusted residency factors would apply to the following degree programs:

Bachelor of Science in Aeronautics with a major in:

- Air Traffic Management
- Aviation Studies
- Commercial Aviation
- Flight Education
- Unmanned Aircraft Systems

Bachelor of Business Administration with a major in:

- Airport Management
- Aviation Management

Online Graduate Courses in Aviation and Space Studies

Market Comparison

2018-19 Base Rate	In-State Rate	Non-Resident Rate	International Rate
ERAU* Private	\$35,964	\$35,964	\$35,964
Western Michigan	\$12,174	\$30,114	\$30,114
Auburn	\$10,968	\$29,640	\$29,640
Purdue University	\$10,524	\$29,366	\$31,526
UND - Proposed	\$7,896	\$23,687	\$27,634

NDUS 2015-2020 Strategic Plan
Tuition Model Principles
Approved by the SBHE October 27, 2016

Consistent with the overarching goal of increased simplicity and transparency, each campus will develop a tuition model that is consistent with the following primary principles:

1. Tuition will be charged per credit hour, except at UND and NDSU where a flat rate will be assessed at either 12 or 13 semester hours. A campus (other than UND or NDSU) that is not currently per credit hour, will have until Fall 2019 to phase in the per credit hour model.
2. To the greatest extent possible, institutions will blend together tuition and non-mandatory fees; however, campuses may retain a separate distance education access fee, as deemed necessary. The discontinuation/phase-out of the distance education fee will be considered after the initial Fall 2019 implementation date.
3. To the greatest extent possible, on-campus and on-line tuition rates should be the same and consistent within residency rates.
4. The SBHE may consider special institutional/program tuition rates based on unique markets, geographic location, enrollment considerations and/or the variable cost of unique academic programs.
5. Assess tuition based on residency as follows:
 - ❖ ND residents-1.0
 - ❖ Minnesota residents -per established reciprocity agreement – 1.12
 - ❖ Other out-of-state U.S. residents and the Canadian Provinces of Manitoba and Saskatchewan- no lower than 1.20
 - ❖ International students, except Manitoba and Saskatchewan –no lower than 1.75

A Fall 2019 implementation date will provide time to conduct analysis on the revenue-neutrality of the rate changes and the 2017 – 2019 state general fund appropriation. Early implementation of all or part of the model is allowable with SBHE approval.

Pursuant to principle 4, the Chancellor and SBHE will consider limited exceptions to the above principles, on a case-by-case basis, as outlined in a documented business case. At a minimum, the business case should include the following:

- reasons/justification for exception request
- estimated cost impact to students, including number of students impacted
- estimated revenue impact to the institution

Campuses are to develop and submit proposed rates and a related transition plan to the Chancellor's Office by not later than March 1, 2018, with the goal of completing full implementation of the new tuition model by not later than Fall 2019. For each principle, the transition plan must clearly indicate the financial impact to rates charged to North Dakota students, as well as the institution overall. In developing proposals, campuses shall engage representative student organizations.

Tuition Waivers:

- ✓ All institutions will develop a waiver model to support/attract quality undergraduate and graduate students.
- ✓ NDUS will implement common definitions, consistent coding and required reporting for waivers, discounts, stipends and tuition remission by Fall 2017.
- ✓ Following full implementation of the tuition model, tuition waivers will be monitored and evaluated to determine the need for additional limitations.

Program Fee Request
Department of Aviation

Program Fee Amount: \$60 per credit, up to \$1,440 annually

Degree Programs: Bachelor of Science in Aeronautics with a major in:
Air Traffic Management Aviation Studies
Commercial Aviation Flight Education
Unmanned Aircraft Systems
Bachelor of Business Administration with a major in:
Airport Management Aviation Management

Justification:

The John D. Odegard School of Aerospace Sciences at the University of North Dakota is a world renowned provider of aerospace education throughout the world. In order to remain a leader in aerospace education, it is imperative to have adequate resources to support advancements in technology, retain high quality faculty and staff and continue evolving the already strong safety program and culture that exists within the program.

As an industry, we are facing a severe pilot shortage, which is both increasing demand for aviation degrees, and increasing compensation for entry-level pilot positions at a dramatic rate. The 2017 Boeing pilot forecast¹ predicts the need for an additional 637,000 pilots by 2036. Major airlines in the United States are hiring at rates that have not been seen in the industry in over 30 years², this rate is only expected to increase dramatically as the legacy carriers are facing large number of retiring pilots. The UND Pilot Supply Forecast states that major airline hiring rates correlates directly to new student interest in an aviation degree. This has proven true in the last few years at UND where new aviation student applications have doubled since the Fall of 2015 to an unprecedented 1,272 applications for Fall 2018. This dramatic increase has put tremendous strain on the Department of Aviation, thus the need for additional resources through the use of a program fee.

Resource Needs:

The most pressing need for the Department of Aviation is the ability to attract and retain high quality aviation faculty and staff to deliver the curriculum to students. Due to the pilot shortage facing the industry, compensation at the entry level, first year out of college, has more than doubled in the last 3 years. A first year First Officer for a small regional airline can start out at over \$80,000³, a new aviation faculty member currently starts at \$60,000/annually. If this disparity is not corrected, the Department of Aviation will lose quality faculty to teach the next generation of aviation professionals.

In order to remain a leader in aviation education, it is imperative to continue to invest in technology and equipment. The aviation industry is very dynamic. Without having adequate resources to invest in changing and new technologies we risk becoming obsolete. This is especially true in the area of Unmanned Aircraft Systems, UND is a definite leader in UAS education, however if we do not continue to invest in this area we will be left behind very quickly. The Department of Aviation also has the plan to put their Aviation Studies degree online. This initiative also requires the investment of faculty time and technologies to complete.

Lastly, the experiential nature of an aviation education requires facilities and equipment that are not the norm for most degree programs. The Department of Aviation requires a large footprint both on campus and at the airport. Investment in these facilities is imperative in providing the most advanced aviation education possible.

1. <https://www.boeing.com/commercial/market/pilot-technician-outlook/>
2. <http://fapa.acro/hiring-all.asp>
3. <http://www.airwis.com/content/pilots/PilotBreakdownFlierOct2017.pdf>

Summary of Proposed Action SBHE Meeting – June 28, 2018

1. **Issue:** Research 1, Room 204 is a server room that houses IT and Telecom equipment for the campus as well as equipment for the Center for Computationally Assisted Science and Technology (CCAST). The room is cooled by a single computer room air conditioning (CRAC) unit that has had major maintenance issues and is past its useful life.
2. **Proposed motion:** Authorize NDSU to proceed with the Research 1, Room 204 [Mechanical Improvements](#) project at an estimated cost of \$350,000 funded from local funds.
3. **Background:** CCAST is critical for supporting NDSU research, so anytime the cooling goes down, the servers must be shut down to prevent overheating.
4. **Financial implications:** The project will be funded from local funds, which are sufficient, available for use, and include no unrestricted gift funds. More than 75% of this project cost addresses deferred maintenance.
5. **Academic implications:** None
6. **Legal/policy issues:** None
7. **Review Process:** Reviewed by Tonder
8. **Enclosures:** (agenda item and related material)
9. **Contact person:** Bruce Bollinger, Vice President for Finance and Administration, NDSU
10. **Chancellor's Recommendation:** Approve

North Dakota State University, June 28, 2018

Authorize NDSU to proceed with the **Research 1 Room 204 Mechanical Improvements** project at an estimated cost of \$350,000 funded from local funds.

Project Description

In 2001, Research I was built with state-of-the-art laboratories and equipment, a high performance computer center and research support services. Room 204 is a server room that houses IT and Telecom equipment for the campus as well as equipment for the Center for Computationally Assisted Science and Technology (CCAST). The room is cooled by a single computer room air conditioning (CRAC) unit that has had major maintenance issues and is past its useful life. This room houses redundant equipment for IT and Telecom in the event an issue would occur in our main IT server room. The risk of not having cooling available means our back-up equipment may not be available in an emergency. CCAST is critical for supporting NDSU research, so anytime the cooling goes down, we lose efficiency because the servers must be shut down to not overheat.

This project will include HVAC upgrades in the building. We will be removing an old CRAC unit that is past its useful life and causes reliability issues for cooling in the room. The unit has had substantial repairs over the years and is due to be replaced. The room is also lacking proper protection in the event of a fire. If pricing comes in favorably, we will also be adding a fire suppression system to the room.

Consistency with Campus Facility Master Plan and Budget

The 2016 NDSU Campus Master Plan identifies several section related to this project:

- Section 2.b.vi Facility/Physical Infrastructure Components Insufficient/Inadequate to Support Current Functions of NDSU – refers to twenty first century research’s reliance on technology.
- Section 2.c.i. Maintenance and Facility Condition Standards HVAC – refers to an equipment replacement plan and importance of good ventilation/cooling.
- Section 2.c.i. Research Labs – refers to proper laboratory configuration, ventilation, and infrastructure.
- Section 2.c.ii. General Facility/Physical Infrastructure Component Maintenance HVAC Systems – refers to the necessity of HVAC systems to maintain computer clusters, IT closets, and telecom rooms.
- Section 3.b. Deferred Maintenance Priority (DMP) number 27 – Maintain Existing NDSU Data Centers.

SBHE and/or Legislative History

N/A

Estimated Total Purchased or Donated Costs (ALL costs should be included in the estimate, unless specifically noted otherwise).

	Amount
Planning, Permits and Insurance (design costs associated with current project, OMB preplanning revolving funds, architect and engineer fees, permits, insurance)	\$21,500
Land/Building Preparation and Purchase or Donated Costs (land acquisition and site preparation/development)	\$
Demolition and Disposal	\$
Construction (foundation and building construction or renovation, including fixed equipment, landscape, infrastructure and utilities, mechanical and electrical, parking and driveways or roadways)	\$280,000

Institutional work (value of work completed by institutional trade staff)	\$6,000
Contingency	\$42,500
Hazardous Material Abatement	\$
Other, including 3rd party costs (please describe)	\$
SUBTOTAL (if total exceeds \$250,000, requires SBHE approval)	\$350,000
FF&E, if funded as part of legislatively authorized project	\$
TOTAL	\$

No other work, other than that specified within this request, is required for the completion of the project not is other work planned to supplement this project using funding or authority not included within this request.

Future Operating/Improvement Costs and Funding Sources

N/A

Source and Availability of Funds

The project will be funded from local funds, which are sufficient, available for use, and include no unrestricted gift funds. More than 75% of this project cost addresses deferred maintenance.

Estimated FF&E, NOT reported above (informational only)

If required, FF&E will be covered by other sources.

Project Management Oversight (consistent with 9/25/13 SBHE approved guidelines)

The NDSU Facilities Management Director will be the project manager supporting this project in compliance with SBHE guidelines approved 9/25/13.

Estimated Project Timeline and Completion Date:

The anticipated start of the Research 1 Room 204 Mechanical Improvements project is summer 2018 with a substantial completion date in the fall of 2018.

Summary of Proposed Action SBHE Meeting – June 28, 2018

1. **Issue:** Burlington Northern Santa Fe Railway Company (BNSF) approached NDSU to acquire a section of land adjacent to BNSF property for the purpose of constructing a fueling station.
2. **Proposed motion:** Authorize NDSU to enter into a [Purchase and Sale Contract](#) with Burlington Northern Santa Fe (BNSF) Railway Company, a Delaware corporation, for land located near the NDSU campus in the amount of \$56,500.
3. **Background:** The transfer of land was approved by the Sixty-fifth Legislative Assembly, with authorization included in Section 29 of SB2003, and subject to final approval by the SBHE and the commissioner of university and school lands. NDSU is now preparing to transfer this parcel of land, to BNSF. This will be by conveyance of a quitclaim deed to satisfy the requirements of N.D.C.C. 54-01-05.1 and SBHE Policy 910 Transfer of Real Property, as well as the recommendation made by the Commissioner of the ND Department of Trust Lands. As per SBHE Policy 910, the Department of Trust Lands also reviewed its land records for the tract and determined that “the tract was never classified as school lands that are original grant land”.
4. **Financial implications:** None
5. **Academic implications:** None
6. **Legal/policy issues:** None
7. **Review Process:** Reviewed by Tonder
8. **Enclosures:** (agenda item and related material)
9. **Contact person:** Bruce Bollinger, Vice President for Finance and Administration, NDSU
10. **Chancellor’s Recommendation:** Approve

North Dakota State University, June 28, 2018

Authorize NDSU to enter into a **Purchase and Sale Contract** with Burlington Northern Santa Fe (BNSF) Railway Company, a Delaware corporation, for land located near the NDSU campus in the amount of \$56,500.

Background Information

Burlington Northern Santa Fe Railway Company (BNSF) approached NDSU to acquire a section of land adjacent to BNSF property for the purpose of constructing a fueling station. The land has been/is currently used as agricultural research land for animal research efforts by the Agricultural Experiment Station scientists in the NDSU Department of Animal Sciences.

The transfer of land was approved by the Sixty-fifth Legislative Assembly, with authorization included in Section 29 of SB2003, and subject to final approval by the SBHE and the commissioner of university and school lands. To facilitate transfer of land, NDSU and BNSF agreed to establish an easement/right-of-way which allowed BNSF to enter the land and begin limited site work for the purpose of designing the improvements for the intended use as a fueling station. The easement does not guarantee that the land will be transferred, and includes provisions for restoring the property should the transfer not occur. This easement was authorized by the SBHE at its September 28, 2017 meeting.

NDSU is now preparing to transfer this parcel of land (~0.86± acres) located in the SW¼ of Section 35, Township 140 North, Range 49 West, Cass County, North Dakota, to BNSF. This will be by conveyance of a quitclaim deed to satisfy the requirements of N.D.C.C. 54-01-05.1 and SBHE Policy 910 Transfer of Real Property, as well as the recommendation made by the Commissioner of the ND Department of Trust Lands. As per SBHE Policy 910, the Department of Trust Lands also reviewed its land records for the tract and determined that “the tract was never classified as school lands that are original grant land”.

Therefore, NDSU is requesting authorization to enter into the attached Purchase and Sale Contract, Unimproved Property at the market price of \$56,500 for the tract of land stated above. The purchase price was established by an independent appraisal to be \$37,492.

Consistency with Campus Facility Master Plan and Budget

The land sale is not part of the NDSU Campus Facility Master Plan.

SBHE History

September 28, 2017: SBHE authorized NDSU to provide BNSF with an easement and right-of-way for a tract of land lying in the Southwest Quarter of Section 35, Township 140 North, Range 49 West of the 5th Principal Meridian. The SBHE further authorized the Chancellor to determine jointly with the commissioner of university and school lands, the terms of conveyance as per SB 2003, prior to final approval by the Board.

Legislative History

SB2003 of the Sixty-fifth Legislative Assembly, **Section 29. Transfer of Land Authorized** states:

The state of North Dakota, by and through the state board of higher education, shall convey certain real property consisting of approximately 0.8 acres parallel and adjacent to the BNSF railway company right-of-way in Cass County, North Dakota, known as parcel number 01-3504-08500-000 in the records of Cass County, North Dakota, to BNSF railway company, if determined appropriate by the state board of higher education and the commissioner of university and school lands. The terms of the conveyance must be determined jointly by the state board of higher education or a designee of the board and the commissioner of university and school lands. North Dakota Century Code sections 54-01-05.2 and 54-01-05.5 do not apply to the transfer authorized by this section.

Attached are the Quitclaim Deed and Purchase and Sales Contract for this transaction.

PURCHASE AND SALE CONTRACT
UNIMPROVED PROPERTY

THIS PURCHASE AND SALE CONTRACT ("Contract") is entered into as of the Effective Date (defined below) by and between **STATE OF NORTH DAKOTA** and the **NORTH DAKOTA STATE BOARD OF HIGHER EDUCATION** ("Seller") by and through **NORTH DAKOTA STATE UNIVERSITY**, and **BNSF RAILWAY COMPANY**, a Delaware corporation ("Purchaser").

In consideration of the mutual covenants set forth in this Contract and for other valuable consideration, which the parties acknowledge receiving, Seller and Purchaser agree as follows:

Section 1. Sale and Purchase.

(a) Subject to the terms and conditions set forth in this Contract, Seller agrees to sell and convey to Purchaser (or its designee), and Purchaser (or its designee) agrees to purchase and accept from Seller, for the Purchase Price (defined below):

(1) That certain tract of land (the "Land") in Cass County, North Dakota consisting of approximately 0.86 acres in Cass County, North Dakota more particularly described in the attached **Exhibit "A"** and to be more particularly described as provided in Section 3, together with all strips and gores, easements, rights-of-way, licenses, interests, rights, and appurtenances appertaining to the Land, if any.

(2) All rights, titles, and interests of Seller in and to any easements, rights-of-way, or other interests in, on, or to any alley, highway, or street in, on, across or adjoining the Land.

(3) All site plans, surveys, soil and substrata studies, environmental assessments, plans and specifications, engineering plans and studies, landscape plans, and other plans, studies or reports of any kind in Seller's or its contractors' or agents' possession that relate to the Property ("Plans and Studies").

(4) Any and all other rights, titles, interests, privileges, and appurtenances owned by Seller and in any way related to, or used in connection with, the ownership of the Land; provided that Purchaser desires to receive assignment of the same.

(b) The above listed items are collectively called the "Property." The Property must be conveyed, assigned, and transferred to Purchaser (or its designee) at the Closing (defined below) free and clear of all liens, claims, easements, covenants, conditions, rights-of-way, reservations, restrictions, encroachments, tenancies, mineral interests, royalty interests, oil, gas or mineral leases, and any other type of encumbrance (collectively, the "Encumbrances"), except the Encumbrances appearing in the Title Commitment (defined below) that either are not objected to, or, if objected to, are not cured and that are subsequently waived in accordance with Section 3 ("Permitted Encumbrances"). Notwithstanding the foregoing, pursuant to North Dakota Century Code § 38-09-01, fifty percent of all oil, natural gas, or minerals which may be found on or underlying the Property shall be reserved to the State of North Dakota.

Section 2. Purchase Price and Earnest Money.

- (a) The purchase price ("Purchase Price") for the Property is **Fifty-Six Thousand Five-Hundred and 00/100 Dollars** (\$56,500.00).
- (b) The Purchase Price is payable in cash at the Closing (defined below).
- (c) Intentionally deleted.

Section 3. Title Commitment and Survey.

(a) As soon as practicable, but no later than Ninety (90) days after the Effective Date, Purchaser, at its expense, will deliver or cause to be delivered to Seller the following:

(1) An ALTA Owner's Commitment for Title Insurance ("Title Commitment") from **Fidelity National Title Insurance Company** ("Title Company"). The Title Commitment will set forth the status of title to the Property and will show all Encumbrances and other matters, if any, relating to the Property.

(b) As soon as practicable, but no later than thirty (30) days after the delivery of the Title Commitment, Seller, at its expense, will deliver or cause to be delivered to Purchaser the following:

(1) Legible copies of all documents referred to in the Title Commitment, including but not limited to lien instruments, plats, reservations, restrictions, and easements.

(2) Copies of the tax statements covering the Property.

(c) Within One-Hundred and Twenty (120) days after the Effective Date, Purchaser, at its expense, will deliver to Seller a survey ("Survey") consisting of a plat and to the extent available, field notes describing the Property. The Survey must be a current, on-the-ground, staked survey performed by a registered public surveyor or engineer satisfactory to the Title Company. Subject to the provisions of Sections 3(d) and 3(e), the description of the Land shown on the Survey shall be used in all transaction documents requiring a legal description of the Land and Purchaser and Seller shall execute a supplement to this Contract inserting the legal description in Exhibit A.

(d) Purchaser must give Seller written notice of any objections ("Objections") to the Title Commitment or the Survey (including, but not limited, to the legal description) within thirty (30) business days after receiving the Title Commitment, the Survey, and all documents referred to in the Title Commitment and the Survey. At the Closing, Seller will provide releases for any deed-of-trust liens, judgment liens, mechanic's liens, delinquent taxes, or any other monetary liens

encumbering the Property; provided, however, that if any such liens also encumber other property owned by Seller, Seller will not be required to obtain releases as to such other property, so long as Seller appropriately subdivides such other property from the Property.

(e) If Purchaser gives notice of the Objections, then Seller may (i) cure the Objections; (ii) cause the Title Commitment and the Survey to be amended to reflect cured matters; and (iii) give Purchaser a written response concerning the Objections within five (5) business days after receiving the notice from Purchaser. If Seller does not respond as described, then Purchaser is entitled either:

(1) To terminate this Contract by written notice to Seller and Title Company at any time within ten (10) business days after receipt of written notice from Seller stating that Seller will not or cannot cure the Objections. Upon termination, neither party will have any further rights or obligations under this Contract; or

(2) To waive the Objections that Seller will not or cannot cure and consummate the purchase of the Property subject to those Objections, which will be deemed to be Permitted Encumbrances.

(3) Notwithstanding the foregoing Sections, if Seller has commenced curing the Objections and is diligently prosecuting the same, as determined by Purchaser in Purchaser's sole discretion, then Purchaser in Purchaser's sole discretion may extend the Feasibility Period for an amount of time Purchaser deems necessary for Seller to cure the Objections.

(F) In the event the Title Commitment and/or Survey are revised after Purchaser's initial receipt of the same so as to include any additional exemptions or Encumbrances not shown on the initial Title Commitment and Survey ("New Encumbrances"), the provisions above shall be applicable to any such New Encumbrance and Purchaser shall have the right to deliver Objections with respect thereto in the same manner as Objections to the initial Title Commitment and Survey except that (i) the Objection Period with respect to any such New Encumbrance shall terminate ten (10) days after Purchaser's receipt of the revised Title Commitment or Survey which first refers to or discloses such New Encumbrance and (ii) the Cure Period with respect to such New Encumbrance shall terminate five (5) days after Seller's receipt of Purchaser's Objections with respect thereto.

Section 4. Feasibility Period.

(a) As used in this Contract, "Feasibility Period" means the period beginning on the Effective Date and ending at 6:00 p.m. Central Time, One-Hundred and Twenty (120) days following the Effective Date. **Purchaser may, at Purchaser's sole discretion, extend the**

Feasibility Period up to one time for 120 days by providing Seller written notification on or before the expiration date of the Feasibility Period, as it may be extended.

(b) At the commencement of the Feasibility Period, Seller will deliver to Purchaser copies of all Plans and Studies.

(c) Purchaser may terminate its obligation to purchase the Property at any time during the Feasibility Period in its sole discretion. Purchaser must exercise its termination rights under this Section 4(b) by delivering written notice to Seller at any time during the Feasibility Period. If Purchaser does not send such a notice during the Feasibility Period, it will be deemed to have elected to proceed with purchasing the Property.

(d) During the Feasibility Period, Purchaser may apply with the appropriate governmental authorities to obtain necessary governmental approvals, variances, or permits for Purchaser's contemplated use. Seller will cooperate with Purchaser's efforts to obtain these approvals.

(e) During the Feasibility Period, Seller will permit Purchaser and its contractors and agents to enter the Property to inspect and test the Property (including systems and structural inspections, soil borings, and environmental tests) as Purchaser deems necessary or desirable. Seller will cooperate with Purchaser in arranging the inspections and tests. Purchaser must repair any damages to the Property resulting from any inspection or testing conducted by it or at its direction, and will hold Seller harmless from any and all activities of Purchaser, its agents or contractors for such inspections or testing.

(f) Notwithstanding anything herein to the contrary, in the event that Seller does not obtain and deliver either the Survey or the Title Commitment within the time periods specified above, the Feasibility Period shall be automatically extended (unless Purchaser gives notice otherwise) for the number of days that Seller is so delayed in delivering the Survey or the Title Commitment.

(g) As consideration for Seller's holding the Property available for purchase during the Feasibility Period, Purchaser has paid Seller \$100 ("Independent Contract Consideration"), which Seller may retain even if this Contract is terminated. The Independent Contract Consideration does not apply to the Purchase Price.

Section 5. Termination, Default and Remedies.

(a) Purchaser will be in default under this Contract if (i) it fails or refuses to purchase the Property at the Closing, or (ii) it fails to perform any of its other obligations either before or at the Closing, and such failure is not cured within five (5) business days after written notice of default from Seller. Purchaser will not be in default, however, if it terminates this Contract when it has an express right to terminate or when Seller fails to perform its obligations under this Contract. If Purchaser is in default, then Seller, as its exclusive remedy, is entitled to terminate this Contract by giving written notice to Purchaser before or at the Closing. Following the termination notice, neither party will have any further rights or obligations under this Contract.

(b) Seller will be in default under this Contract if (i) it fails or refuses to sell the Property at the Closing, or (ii) it fails to perform any of its other obligations either before or at the Closing and such failure is not cured within five (5) business days after written notice from Purchaser. Seller will not be in default, however, if it terminates this Contract when it has an express right to terminate or when Purchaser fails to perform its obligations under this Contract, and such failure is not cured within the cure period described above. If Seller is in default, then Purchaser is entitled either (i) to enforce specific performance of Seller's obligations under this Contract with respect to the Property; or (ii) to terminate this Contract by giving written notice to Seller before or at the Closing, whereupon neither party will have any further rights or obligations under this Contract. Nothing herein shall limit any remedy at law, in equity or otherwise that Purchaser may have against Seller in the event of a breach by Seller of (a) any warranty of Seller set forth herein that is first discovered by Purchaser after the Closing, or (b) an obligation to be performed by Seller after Closing.

(c) Intentionally delete.

Section 6. Closing.

(a) The closing ("Closing") of the sale of the Property by Seller to Purchaser will occur in the Title Company's office on or before 180 days from the Effective Date ("Closing Date").

(b) At the Closing, all of the following must occur, all of which are concurrent conditions:

(1) Seller, at its expense, shall deliver or cause to be delivered to Purchaser the following:

(i) A ~~Special Warranty-Quitclaim~~ Deed ("Deed") in the form attached hereto as Exhibit "C" and incorporated herein by reference.

(ii) Evidence satisfactory to Purchaser and the Title Company that the person executing the Closing documents on behalf of Seller has full right, power, and authority to do so.

(iii) Seller's affidavit setting forth its U.S. Taxpayer Identification Number, its office address, and its statement that it is not a "foreign person" as defined in Internal Revenue Code §1445, as amended.

(iv) The original of each statement for current real estate and personal property taxes that Seller possesses, together with proof of payment of taxes.

(v) Any other document or instrument that may be necessary or reasonably required by Purchaser or the Title Company to consummate the transaction.

(2) Purchaser, at its expense, shall deliver or cause to be delivered to Seller the following:

(i) Immediately available funds via wire transfer in an amount equal to the Purchase Price.

(ii) Evidence reasonably satisfactory to Seller and the Title Company that the person executing the Closing documents on behalf of Purchaser has full right, power, and authority to do so.

(3) Seller and Purchaser shall each pay their respective attorneys' fees, and all escrow and recording fees must be paid according to the custom for commercial real estate closings in the jurisdiction of the Property. If no custom predominates, then Seller and Purchaser shall each pay one-half (1/2) of all escrow and recording fees.

(c) Ad valorem and similar taxes and assessments relating to the Property will be prorated between Seller and Purchaser as of the Closing Date, based on estimates of the amount of taxes and assessments that will be due and payable for the Property during the year in which the Closing Date occurs. As soon as the amount of taxes and assessments on the Property for such year is known, Seller and Purchaser will readjust the amount of taxes and assessments due from each party with the result that Seller is responsible for those taxes and assessments applicable to the Property before the Closing Date and Purchaser is responsible for those taxes and assessments applicable to the Property on and after the Closing Date. All prior years' taxes and assessments will be Seller's obligations. This Section 7(c) will survive the Closing.

(d) [Intentionally omitted].

(e) All utility charges and the charges under any service contracts or insurance premiums that Purchaser elects to assume will be prorated between the parties as of the Closing Date.

(e) Upon completion of the Closing, Seller shall deliver to Purchaser possession of the Property free and clear of all tenancies and parties in possession.

(f) The provisions of Sections 6(c) and (d) above shall survive Closing.

Section 7. Seller's Covenants, Representations and Warranties.

(a) Seller covenants and agrees with Purchaser that:

(1) At all times before Closing, Seller shall maintain in force property and liability insurance with respect to damage or injury to person or property occurring on the Property.

(2) At all times before Closing, Seller shall maintain the Property in as good a condition and repair as exists on the Effective Date, except for normal wear and tear. Seller

shall advise Purchaser of any significant repair or improvement it makes to keep the Property in such condition.

(3) Before Closing, Seller may not create -- or voluntarily permit to be created -- any liens, easements or other conditions affecting all or part of the Property without Purchaser's prior written consent, which Purchaser may withhold in its sole discretion.

(b) Seller represents and warrants to Purchaser that:

(1) Seller is a state university duly organized, validly existing, and in good standing under North Dakota law.

(2) Seller has all requisite power and authority to own the Property, enter into this Contract, and consummate the transaction contemplated in this Contract. Seller has duly authorized the execution and delivery of this Contract such that all documents to be executed by Seller are its valid, legally binding obligations and are enforceable against it in accordance with their terms.

(3) The persons executing this Contract and any and all documents on behalf of Seller have the legal power, right, and actual authority to bind Seller.

(4) Seller has the full right to sell the Property in accordance with this Contract.

(5) Seller has no notice and to the best of Seller's knowledge, there are no actions, suits, or proceedings pending, threatened or asserted against Seller or the Property, before or by any federal, state, municipal, or other governmental department, court, commission, board, bureau, agency, or instrumentality.

(6) Seller has no notice and to the best of Seller's knowledge, there are no pending or threatened condemnation actions, special assessments, or increases in assessed valuation with respect to the Property.

(7) Seller has not received any notice that, and to the best of its knowledge there are no ordinances, regulations, laws, or statutes of any governmental agency pertaining to the Property which the Property violates.

(8) At Closing, there will be no unpaid bills or claims in connection with any work performed or material purchased in connection with the Property.

(9) No person, firm, corporation or other entity has or at the Closing shall have (i) any right or option to acquire the Property, or any part thereof, from Seller, or (ii) have any leasehold, tenancy, or other possessory rights or interests in the Property, or any part thereof.

(10) Seller has not, and at the Closing will not have, entered into any agreement affecting the Property, other than this Contract.

(11) Seller's execution of this Contract and its consummation of the transaction do not, and at the Closing Date will not, breach any agreement or constitute a default or a condition that would ripen into a default under any agreement to which Seller is a party or by which all or part of the Property is bound. Furthermore, Seller's execution of this Contract and its consummation of the transaction do not, and at the Closing will not, violate any order, rule, or regulation applicable to Seller or the Property of any court or any federal, state, or municipal regulatory body or administrative agency or other governmental body.

(12) Intentionally deleted.

(13) No representation, warranty, or statement of Seller in this Contract or in any document or Information to be furnished to Purchaser misstates or omits any material fact necessary to make the statements or facts contained therein not materially misleading. Seller knows of no situation on or about the Property not disclosed to Purchaser in writing which Seller reasonably should know would affect Purchaser's consideration of the Property.

(14) Intentionally deleted.

(c) Seller's representations, warranties, and covenants in this Contract are subject to the following terms and conditions:

(1) Seller's representations, warranties, and covenants are (i) material and being relied upon, and (ii) continuing, made both as of the Effective Date and as of the Closing Date, except to the extent that Seller otherwise notifies Purchaser in writing at or before Closing. If Seller so notifies Purchaser in writing at or prior to Closing -- or if Purchaser independently discovers on or prior to the Closing -- that any material representation, warranty, or covenant is no longer true, Purchaser may either (i) terminate this Contract by written notice to Seller, and neither party will have any further rights or obligations under it; or (ii) waive the representation, warranty, or covenant and close the purchase of the Property. If Purchaser discovers after the Closing that any representation or warranty was not true when made then Purchaser shall be entitled to any remedy available at law or in equity.

(2) Seller's representations, warranties, and covenants will survive the Closing for a period of one (1) year.

Section 8. Conditions to Closing.

(a) Notwithstanding anything to the contrary in this Contract, until Closing the following matters are conditions precedent to the obligations under this Contract.

(1) All of Seller's representations and warranties must be true and correct as of Closing in all material respects.

(2) Seller must deliver, perform, observe, and comply with all of the items, instruments, documents, covenants, agreements, and conditions required of it by this Contract.

(3) Seller shall have received the consent of the North Dakota State Board of Higher Education, the Commissioner of University and School Lands, the North Dakota legislature, and Governor of North Dakota.

(4) Seller must not be in receivership or dissolution, nor have made any assignment for the benefit of creditors, nor admitted in writing its inability to pay its debts as they mature, nor have been adjudicated a bankrupt, nor have filed a petition in voluntary bankruptcy, or a petition or answer seeking reorganization or an arrangement with creditors under state or federal bankruptcy law or any other similar law or statute, nor may any such petition have been filed against it.

(b) Purchaser may waive any of the conditions set forth in Section 8(a) in its sole discretion, at or before Closing with the exception of the item (3). If any of the conditions are not satisfied or waived, Purchaser may terminate this Contract by giving written notice to Seller at or before Closing, and neither party will have any further rights or obligations under this Contract.

Section 9. Brokers. Each Party represents and warrants to the other that it has not engaged, or become liable to, any agent, broker, or other similar party in connection with this transaction. The provisions of this **Section 9** shall survive Closing and any termination of this Agreement.

Section 10. Notices.

(a) Any notice under this Contract must be written. Notices must be either (i) hand-delivered to the address set forth below for the recipient; or (ii) placed in the United States certified mail, return receipt requested, addressed to the recipient as specified below; (iii) deposited with an overnight delivery service, addressed to the recipient as specified below; or (iv) telecopied by facsimile transmission to the party at the telecopy number listed below, provided that the transmission is followed with a copy sent by overnight delivery or regular mail to the address specified below. Any notice is effective upon deposit with the U.S. Postal Service or with the overnight delivery service, as applicable; all other notices are effective when received.

(b) Seller's address for all purposes under this Contract is:

North Dakota State University
Attn: President
102 Old Main, NDSU Dept. 1000
P.O. Box 6050
Fargo, ND 58108-6050

Telephone: (701) 231-7211
Telecopy: (701)231-8722

with a copy to:

North Dakota Attorney General's Office
Attn: Matt Hammer
4 Putnam Hall, NDSU Dept. 1020
PO Box 6050
Fargo, ND 58108-6050

Telephone: (701) 231-6446

(c) Purchaser's address for all purposes under this Contract is:

BNSF RAILWAY COMPANY
2301 Lou Menk Drive, GOB-3W
Fort Worth, Texas 76131-2830
Attention: James A. Ball
Telephone: (817) 352-6459

with a copy to:

Shanna Cargill
BNSF Railway Company
2500 Lou Menk Drive, AOB-3
Fort Worth, Texas 76131
Telephone: (817) 352-3304

(d) Either party may designate another address for this Contract by giving the other party at least five (5) business days' advance notice of its address change. A party's attorney may send notices on behalf of that party, but a notice is not effective against a party if sent only to that party's attorney.

Section 11. Entire Agreement. This Contract (including its exhibits) contains the entire agreement between Seller and Purchaser. Oral statements or prior written matter not specifically incorporated into this Contract has no force or effect. No variation, modification, or change to this Contract binds either party unless set forth in a document signed by the parties or their duly authorized agents, officers, or representatives.

Section 12. Assigns. This Contract inures to the benefit of and binds the parties and their respective legal representatives, successors, and permitted assigns. Purchaser may assign its rights or obligations under this Contract without Seller's consent, but with notice to Seller. Purchaser may assign its rights or obligations under this Contract to its 1031 Tax Exchange Entity without the consent of Seller.

Section 13. Effective Date. The date on which the last of Seller and Purchaser signs this Contract is the "Effective Date" of this Contract.

Section 14. Time of the Essence. Time is of the essence in this Contract. Whenever a date specified in this Contract falls on a Saturday, Sunday, or federal holiday, the date will be extended to the next business day.

Section 15. Destruction, Damage, or Taking Before Closing. If, before the Closing, the Property or any substantial portion of it is damaged or destroyed or becomes subject to a taking by eminent domain, Purchaser may either (i) terminate this Contract, and neither party will have any further rights or obligations under this Contract; or (ii) proceed with the Closing of the Property, and Seller will assign to Purchaser all condemnation or insurance proceeds available as a result of such damage, destruction, or taking.

Section 16. Tax-Deferred Exchange Under I.R.C. § 1031. Purchaser may assign its rights (but not its obligations) under this Agreement to Goldfinch Exchange Company LLC, an exchange intermediary, in order for Purchaser to effect an exchange under Section 1031 of the Internal Revenue Code. In such event, Purchaser shall provide Seller with a "Notice of Assignment," attached hereto as Exhibit "B", and Seller shall execute an acknowledgement of receipt of such notice. Seller may also assign its rights (but not its obligations) under this Agreement to an exchange intermediary in order for Seller to effect an exchange under Section 1031 of the Internal of Revenue Code. Seller agrees to fully cooperate with Purchaser to permit Purchaser to accomplish a tax-deferred exchange, but at no additional expense or liability to Seller for such tax-deferred exchange, and with no delay in the Closing. Seller's cooperation will include, without limitation, executing such supplemental documents as Purchaser may reasonably request. Seller agrees that Purchaser may use its standard form of "Assignment of Rights," attached hereto as Exhibit "C", in connection with any tax deferred exchange.

Section 17. Terminology. The captions beside the section numbers of this Contract are for reference only and do not modify or affect this Contract. Whenever required by the context, any gender includes any other gender, the singular includes the plural, and the plural includes the singular.

Section 18. Governing Law. This Contract is governed by and must be construed in accordance with North Dakota law.

Section 19. Severability. If any provision in this Contract is found to be invalid, illegal, or unenforceable, its invalidity, illegality, or unenforceability will not affect any other provision, and this Contract must be construed as if the invalid, illegal, or unenforceable provision had never been contained in it.

Section 20. Rule of Construction. Each party and its counsel have reviewed and revised this Contract. The parties agree that the rule of construction that any ambiguities are to be resolved against the drafting party must not be employed to interpret this Contract or its amendments or exhibits.

Section 21. Intentionally deleted.

Section 22. Counterparts. To facilitate execution, this Agreement may be executed in as many counterparts as may be convenient or required. It shall not be necessary that the signature or acknowledgement of, or on behalf of, each part, or that the signature of all persons required to bind any party or the acknowledgment of such party, appear on each counterpart. All counterparts shall collectively constitute a single instrument. It shall not be necessary in making proof of this Agreement to produce or account for more than a single counterpart containing the respective signatures of, or on behalf of, and the respective acknowledgments of, each of the parties hereto. Any signature or acknowledgment page to any counterpart may be detached from such counterpart without impairing the legal effect of the signatures or acknowledgments thereon and thereafter attached to another counterpart identical thereto except having attached to it additional signature or acknowledgment pages.

EXECUTED as of the Effective Date.

SELLER

_____ ,

a(n) _____

By: _____

Name: _____

Title: _____

Date: _____

PURCHASER

BNSF RAILWAY COMPANY,
a Delaware corporation

By: _____

Name: _____

Title: _____

Date: _____

_____ (Title Company) acknowledges receipt of this Contract on _____, 201___. Upon receipt of the Earnest Money provided for in the Contract, the Title Company agrees to notify Seller and Purchaser, to hold the Earnest Money in accordance with the Contract, and to abide by and perform in accordance with the escrow provisions contained in this Contract.

_____ ,

a(n) _____

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT "A"

LEGAL DESCRIPTION OF PROPERTY

Legal Description to be added by Supplement pursuant to Section 3.

EXHIBIT "B"

Goldfinch Exchange Company LLC

A Delaware limited liability company

40 Lake Bellevue Drive, Suite 101

Bellevue, WA 98005

425-646-4020

425-637-2873 fax

NOTICE OF ASSIGNMENT

TO: _____ and any assignees or exchange intermediaries of Seller

You and BNSF Railway Company ("BNSF") have entered into a Purchase and Sale Contract, dated _____ for the sale of the real property described therein. You are hereby notified that BNSF has assigned its rights as Purchaser, but not its obligations, to Goldfinch Exchange Company LLC for the purpose of completing a tax deferred exchange under Internal Revenue Code Section 1031. This is an assignment of rights only and you will deed the property directly to BNSF.

ACKNOWLEDGED:

<Property – Seller>

EXHIBIT "C"

ASSIGNMENT OF RIGHTS UNDER PURCHASE AND SALE CONTRACT

(Please see attached)

When recorded mail to:
BNSF Railway Company
c/o HDR
600 West Sixth Street, Suite 200
Fort Worth, TX 76102

For tax information mail to:
BNSF Railway Company
Property Tax Department
P.O. Box 961089
Fort Worth, TX 76161-0089

QUITCLAIM DEED

**STATE OF NORTH DAKOTA §
 § **KNOW ALL MEN BY THESE PRESENTS:**
COUNTY OF CASS §**

THIS QUITCLAIM DEED ("Deed") is made by and between the STATE OF NORTH DAKOTA and the NORTH DAKOTA STATE BOARD OF HIGHER EDUCATION, ("Grantor") by and through NORTH DAKOTA STATE UNIVERSITY, and BNSF RAILWAY COMPANY, a Delaware corporation, whose mailing address is 2301 Lou Menk Drive, GOB-3W, Fort Worth, Texas 76131 ("Grantee").

WITNESSETH that for and in consideration of the sum of TEN and NO/100 Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Grantor has QUITCLAIMED and by these presents does QUITCLAIM unto Grantee all of the real property described in Exhibit "A" attached hereto and made a part hereof for all purposes, together with (i) all improvements thereon, if any, (ii) all right, title and interest of Grantor in and to all and singular the rights, benefits, privileges, easements, tenements, hereditaments, and appurtenances thereon or in anywise appertaining to such real property, and (iii) all right, title and interest of Grantor and to all strips and gores and bed of any street, road, or alley, open or proposed, adjoining such real property (collectively, the "Property").

Reserving an undivided fifty percent (50%) of all oil, gas, coal, and other minerals, provided, however, that (i) Grantor absolutely and completely waives and releases, on behalf of Grantor and Grantor's heirs, successors and assigns, all rights of ingress and egress and all other rights of every kind and character whatsoever to enter upon or to use the surface of the Property or any part thereof for any reason, including, without limitation, the right to enter upon the surface of the Property for purposes of exploring for, developing, mining, drilling and/or producing the oil, gas and/or other minerals in and under, and that may be produced from, the Property, or any other purpose incident thereto and (ii) any future leases or assignments or other instruments affecting oil, gas and/or other minerals executed by Grantor, Grantor's heirs, successors or assigns, covering the oil, gas and/or other minerals in and under, and that may be produced from, the Property shall expressly exclude rights of ingress and egress as to the surface of the Property, and shall further expressly provide that any lessees, Grantors, assignees or other party therein shall have no right to conduct exploration, development or production operations on the surface of the Property, or any portion thereof, or to construct any improvements thereon.

TO HAVE AND TO HOLD the Property, together with all and singular the rights and appurtenances thereto in anywise belonging unto the said Grantee, its successors and assigns, forever in fee simple.

EXECUTED this ____ day of _____, 20__.

GRANTOR

THE STATE OF NORTH DAKOTA

By: Doug Burgum, Governor

ATTEST:

State of North Dakota)
County of Burleigh)

The foregoing instrument was acknowledged before me, this ____ day of _____, 20__, by Doug Burgum, Governor of the State of North Dakota. (See N.D.C.C. § 47-19-14.5 et seq.)

Alvin A. Jaeger, Secretary of State

NORTH DAKOTA STATE UNIVERSITY
OF AGRICULTURE AND APPLIED
SCIENCE

By: Dean L. Bresciani, President

ATTEST:

By: Bruce A. Bollinger, Vice President for
Finance & Administration

Exhibit "A"

Legal Description

That part of the Southwest Quarter of Section 35, Township 140 North, Range 49 West of the Fifth Principal Meridian, Cass County, North Dakota, described as follows:

Commencing at the southeast corner of the Southwest Quarter of said Section 35; thence North $01^{\circ}20'00''$ West, along the easterly line of the Southwest Quarter of said Section 35, for a distance of 1156.85 feet to a point of intersection with the northerly right-of-way line of the Burlington Northern Santa Fe Railroad; thence North $64^{\circ}43'08''$ West, along the northerly right-of-way line of said railroad, for a distance of 1063.00 feet, to the true point of beginning; thence continue North $64^{\circ}43'08''$ West, along the northerly right-of-way line of said railroad, for a distance of 418.00 feet; thence North $25^{\circ}16'52''$ East, perpendicular to the northerly right-of-way line of said railroad, for a distance of 55.00 feet; thence South $64^{\circ}43'08''$ East, parallel with the northerly right-of-way line of said railroad, for a distance of 640.00 feet; thence North $73^{\circ}06'45''$ East, for a distance of 75.68 feet; thence South $64^{\circ}43'08''$ East, parallel with the northerly right-of-way line of said railroad, for a distance of 61.00 feet; thence South $19^{\circ}28'27''$ East, for a distance of 149.00 feet, to the true point of beginning.

Said tract of land contains 0.906 acres, more or less, and is subject to easements as may be of record.

Exhibit B
Permitted Encumbrances

None.

Summary of Proposed Action ND State Board of Higher Education Meeting – June 28, 2018

- 1. Issue:** North Dakota State University (NDSU) has submitted a recommendation for [tenure](#) for review by the State Board of Higher Education (SBHE). The tenure application being presented here is for an individual who is new to the faculty of NDSU but has held tenure elsewhere. In this case, criteria for tenure has been identified and applied by NDSU's internal process.
- 2. Proposed actions:** Recommend approval for tenure, listed in paragraph 3, effective at the start of Academic Year 2018-2019.
- 3. Background information:** The following individual faculty member is recommended for tenure by NDSU. While tenure is assigned within a unit, organizational and structural changes, transfers and similar circumstances do not effect tenure status.

North Dakota State University

David A. Grewell, Ph.D., Professor and Chair, Department of Industrial and Manufacturing Engineering.

- 4. Financial implications:** Any additional expenses associated in contracting the listed candidate as tenured faculty will be drawn from NDSU's budget for the AY 2018-19, and thereafter.
- 5. Legal/policy issues:** SBHE Policy 605.1, Academic Freedom and Tenure—Academic Appointments, requires Board approval of candidates for tenure at the respective institutions.

Paragraph 4-b(ii) specifies the awarding of tenure in exceptional circumstances, and so reads:

The Board may, following review and recommendations made pursuant to the procedures established at an institution award tenure in exceptional circumstances, defined by the institution's procedures, to an institution's chief academic officer or to any other person appointed to the faculty who has not met the eligibility requirement of subdivision 3(c) of this policy, provided that the person, at the time tenure is granted, has:

- held a tenured appointment at another institution, or
- been a faculty member at the institution for at least one prior academic year.

- 6. Academic issues:** Addressed in paragraphs 3 and 5.
- 7. Coordination:** The request was reviewed initially by the sending institution and was approved by its president. The request was also reviewed by the Interim Vice Chancellor for Academic and Student Affairs.
- 8. Attachments:** Candidate recommendation form

9. Contact information: Lisa Johnson, Interim Vice Chancellor for Academic and Student Affairs, NDUS. Ph: 701-328-4143/email: lisa.a.johnson@ndus.edu.

10. Chancellor's recommendation: N/A

June 13, 2018

Lisa Johnson
Interim Vice Chancellor of Academic and Student Affairs
North Dakota University System

Re: Tenure Recommendation for New Hire

The faculty member listed below has met criteria for tenure in the department of Industrial and Manufacturing Engineering as determined by the unit's promotion and tenure evaluation committee, chair, and Dean, as well as the Provost and President:

1. David A. Grewell, Ph.D., Professor and Chair, Department of Industrial and Manufacturing Engineering

I recommend to the State Board of Higher Education that Dr. Grewell be awarded tenure at North Dakota State University.

Sincerely,



Dean L. Bresciani
President

North Dakota University System
TENURE CANDIDATE RECOMMENDATION

INSTITUTION: North Dakota State University

TENURE CANDIDATE: David Grewell, Ph.D.

CURRENT RANK: Professor

TENURE UNIT: Industrial and Manufacturing Engineering

Number of Years of Tenure Credit Earned at Current Institution (Including Current Year): 0

Number of Years of Tenure Credit Awarded for Previous Professional Experience: 6

Policy 605.1, §4 states "The Board may, following review and recommendations made pursuant to the procedures established at an institution award tenure in exceptional circumstances, defined by the institution's procedures, ..., provided that the person has a documented record of outstanding achievement and consistent excellence in a discipline or professional gained through research, scholarly or professional activities, or service."

Qualifications: Dr. David Grewell was offered and accepted the position of Professor and Chair of Industrial and Manufacturing Engineering. He earned his Ph.D. degree in Welding Engineering in 2005 at The Ohio State University. Dr. Grewell has over 10 years of experience working in industry, including positions at Edison Welding Institute and Branson Ultrasonic Corporation. Dr. Grewell has spent most of his academic career at Iowa State University, where he was tenured in 2010 and promoted to full professor in 2014. During his tenure at Iowa State University, Dr. Grewell founded, directed and developed a highly successful National Science Foundation Industry/University Cooperative Research Center focused on bioplastics and biocomposites. Dr. Grewell is a fellow of the Society of Plastics Engineers and serves as the United States' representative for the International Institute of Welding. The offer of tenure at the rank of Full Professor is based on his record, and subject to the approval by the State Board of Higher Education.

Instruction: Dr. Grewell has taught manufacturing courses with an emphasis on polymer processing, including process optimization, troubleshooting and modeling. His graduate level teaching focused on heat flow, fluid dynamics, material modeling, engineering fundamentals, and engineering and globalization. Student feedback on his teaching is positive. Dr. Grewell has mentored 10 Ph.D. and 16 M.S. students to graduation.

Research/Creative Activity: Dr. Grewell's research focus areas include biorenewable biodegradable polymers, nano-composites, bio-renewable fuel sources, high-power ultrasonics, ethanol and biodiesel production, micro-fabrications, and polymer and metal welding. Dr. Grewell has published nearly 80 journal articles, over 65 refereed conference proceedings articles, 14 book chapters, and over a dozen patents. He has given numerous presentations at national and international conferences. Dr. Grewell has received significant extramural funding (over \$17M) for his research program from a variety of sources, including NSF and USDA. Dr. Grewell received the Iowa State University, College of Life Science Agriculture Mid-Career Achievement in Research Award in 2018 and the Team Award in 2017.

Service: Dr. Grewell has served on institutional committees at all levels (department, college, University). He is active in his professional organizations. He serves on the Editorial Board of the Journal of Plastics Technology and the Board of Directors of the Society of Plastics Engineers. He is a frequent reviewer and referee for numerous journals, conferences, and funding agencies. He is active in outreach activities.

Dr. Grewell has positive support from all levels of promotion and tenure review (Department and College Promotion and Tenure Committees, College Dean, Provost, and President). Dr. Grewell has a documented record of outstanding achievement and consistent excellence in teaching, research, and service. **NDSU Recommends Dr. Grewell for tenure.**

If the recommendation of the institution's chief executive differs from the consensus of the campus review, the chief executive is to explain the basis for her/his recommendation. N/A

approved
Alan Benjamin
8-13-18

Summary of Proposed Action ND State Board of Higher Education Meeting – June 28, 2018

1. **Issue:** North Dakota State University (NDSU) has submitted a Stage II request to offer a Graduate Certificate in [Computer Science Education](#), CIP Code 11.0199, via on-campus and distance delivery.
2. **Proposed actions:** Approve/deny the Stage II request of NDSU to offer Graduate Certificate in Computer Science Education, CIP Code 11.0199, via on-campus and distance delivery.
3. **Background information:** NDSU seeks approval of the Graduate Certificate in Computer Science Education as a field where continuous, vigorous growth is expected in the coming decades. To meet this anticipated growth, we will need high school computer science teachers, which means the need for graduate level training for high school teachers. Higher education is anticipating a significant increase in enrollment in Computer Science.
4. **Financial implications:** None cited.
5. **Legal/policy issues:** State Board of Higher Education (SBHE) Policy 403.1 *Program Approval* states: "Board approval is required for all new programs of study that designate a focused collection of instructional/ learning activities the completion of which signifies a level of competence which the awarding institution so designates by a notation on the front of the student transcript."
6. **Academic issues:** No academic issues were raised at the June 6, 2018 Academic Affairs Council (AAC) meeting.
7. **Coordination:** On June 6, 2018, the AAC voted unanimously to recommend approval of the Stage II request for review by the Chancellor's Cabinet and advance to the SBHE for approval/denial.
8. **Attachments:** The Stage II request is attached.
9. **Contact information:** Lisa A. Johnson, Interim Vice Chancellor for Academic and Student Affairs, NDUS. Ph: 701-328-4143/email: lisa.a.johnson@ndus.edu.
10. **Chancellor's recommendation:** Approved

May 9, 2018

Richard Rothaus, Ph.D.
Vice Chancellor for Academic and Student Affairs
North Dakota University System
State Capitol Building, 10th Floor
Bismarck, ND 58505

Dear Dr. Rothaus:

In accordance with SBHE Policy 403.1, Program Approval, North Dakota State University seeks approval to offer a:

- **Graduate Certificate in Computer Science Education**

NDSU requests approval to offer a Graduate Certificate in Computer Science Education through the College of Science and Mathematics. Computer Science is a field where continuous vigorous growth is expected in the coming decades. To meet this growth, we need high school Computer Science teachers, which means we need graduate school training for high school math teachers. Higher education is facing a significant increase in enrollment in Computer Science.

Please place this Stage II request on the June 6-7, 2018 AAC agenda. If you have any questions concerning this request, please contact me. Your consideration is greatly appreciated.

Sincerely,



Beth Ingram
Provost

North Dakota University System
ACADEMIC AFFAIRS FORMAL REQUEST
STAGE II COVER PAGE

This form is to accompany each academic request to the System office for State Board of Higher Education or Chancellor action. The purpose of the form is to streamline the request process, promote consistency, and foster improved record-keeping.

Institution: North Dakota State University

I. Action requested:

- Approval of new program, Policy 403.1, "Program Approval", SBHE approval
- Approval of new prefix
- Termination of program, Policy 403.1.1, "Program Termination", SBHE approval
- Place program on inactive status, Policy 403.1.3, "Inactive Programs", Chancellor approval
- Program title change, Policy 403.4, "Changes in Program Titles", Chancellor approval
- Corresponding degree title change
- Distance education approval, Policy 404.1, "Distance Learning Credit Activities", Chancellor approval
 - New Change Update Notice
- Organizational change, Policy 307.1, "Institutional Organization-Notice and Approval", SBHE approval
 - New Change Termination
- Other, Policy _____, " _____ ", _____ approval

Effective Date: Summer 2019

II. Program information (where applicable):

NDUS Academic Program Code (this is an abbreviation of the Description; example UGBIO) _____

Program or Organizational Title Graduate Certificate in Computer Science Education

Old title (if title change) _____

- Major
- Minor
- 2nd Major

Short Title Description; (10 characters title) GCERT-CSE

Program Prefix Requested N/A

Implementation Date (old and new dates cannot overlap) Summer 2019

First Valid Term Summer 2019

Academic Career (UG, G, L, M) G

Grading Scheme (UG, G, L, M, Ph) G

Academic Group; (division, college, school) College of Science and Mathematics

Academic Organization/Department Computer Science

CIP Code 11.0199

Exact degree/award title (refer to NDUS Procedure 409 for title list):

- | | |
|--|---|
| <input type="checkbox"/> Diploma | <input type="checkbox"/> Bachelor of Science in Education (B.S.Ed) |
| <input checked="" type="checkbox"/> Certificate Program | <input type="checkbox"/> Master of Arts (M.A.) |
| <input type="checkbox"/> Associate of Arts (A.A.) | <input type="checkbox"/> Master of Science (M.S) |
| <input type="checkbox"/> Associate of Applied Science (A.A.S.) | <input type="checkbox"/> Doctorate in Education (Ed.D.) |
| <input type="checkbox"/> Associate of Science (A.S) | <input type="checkbox"/> Doctor of Philosophy (Ph.D.) |
| <input type="checkbox"/> Bachelor of Arts (B.A.) | <input type="checkbox"/> _____ |
| <input type="checkbox"/> Bachelor of Science (B.S.) | <input type="checkbox"/> This title is currently not in Procedure 409 |
| <input type="checkbox"/> Authorized to Offer Degree | |

III Submitted by:

Name: Ken Nygard

Date: 01/05/2018

For System Office use only:

Office / / AAC / / Cabinet / / Chancellor / /
 Board / / HECN / / CIP code Major code

New Program Proposal

CSCI-CERT : Graduate Certificate in Computer Science Education

Conceptually, how does the proposal meet the Roundtable recommendations?

Economic Development Connections

Computer Science education at the high school level is a growing need in North Dakota, and a Computer Science Education certificate will be a desirable credential. This will lead to relieving the workforce issues in North Dakota and the region.

Education Excellence

Better prepared high school teachers will result in better prepared incoming freshmen

Flexible and Responsive System

This certificate is primarily aimed at high school teachers in need of credentials to teach "dual credit" courses in their schools. We also plan to attract AP Computer Science instructors. The Provost at NDSU passed along a message that such certificates were being requested by North Dakota educators. According to <http://www.newenglandextra.com/2017/12/15/burgum-joins-governors-partnership-aimed-increasing-access-k-12-computer-science-education/>, "Gov. Doug Burgum is joining Governors for Computer Science, a partnership comprised of bipartisan state leaders committed to advancing policy and funding to expand access to, and increase equity in, K-12 computer science education." In addition, according to <http://www.grandforksherald.com/opinion/editorials/4370000-our-view-computer-science-needs-expanded-role-north-dakota> "State Superintendent of Public Schools Kirsten Baesler seems to think so, and this week she is urging North Dakotans to consider the merits of computer science education."

Accessible System

The certificate program will be offered both online and face-to-face all year long.

Funding and Rewards

No new resources are requested to deliver this program. In the long run, we anticipate the certificate program will be self-supporting.

Sustaining the Vision

The program is of exceedingly high relevance to the state, given the large and growing demonstrated need for Computer Science education at the high school level. We anticipate the Land Grant mission of NDSU will be furthered by the addition of this Graduate Certificate in Computer Science Education

PROGRAM OBJECTIVES:

The Computer Science Education Graduate Certificate Program will offer the following characteristics:

1. Focus on fundamental topics providing a broad background in Computer Science.
2. Be flexible enough to allow students from varied backgrounds and different points in their working career to enter the program with a minimum of pre-requisite work.
3. Be flexible enough to allow students currently pursuing advanced degrees in computing related disciplines to join the program and readily add the Graduate Certificate to their credentials.
4. Provide the necessary 18 credit hours for high school teaching credentials while presenting a course offering schedule to allow students to complete the program in one calendar year.
5. Make maximum use of existing department and resources at NDSU to support delivery of the program.
6. Gain a broad background and knowledge in Computer Science Education through a fixed set of core courses.

NEED:

Computer Science (CS) is a field where continuous vigorous growth is expected in the coming decades. To meet this growth, we need high school CS teachers, which means we need graduate school training for high school math teachers (and others). Across the continent, higher education is facing a significant increase in enrollment in Computer Science. According to the Computing Research Association (Bizot 2017) "The current enrollment surge has exceeded previous CS booms, and there is a general sense that the current growth in enrollment is substantially different than that of the mid-1980s and late 1990s."

The Generation CS report (CRA 2017) analyzes an enrollment survey administered by the Computing Research Association (CRA) in parallel with CRA's annual Taulbee Survey with the following observations:

- - There has been phenomenal growth of computer science majors in the United States and Canada since 2006 (e.g., the number of CS majors enrolled at doctoral-granting units has more than tripled since 2006); furthermore, the data indicates that continued growth is likely.

- - Units are seeing remarkable growth of non-majors taking computer science courses and an increase in computer science minors.
- - The report also examines the impact of the enrollment surge on diversity saying there appears to be positive increases in percentages of women and underrepresented minority students involved in computer science.
- - The report also touches on the impact of the enrollment surge in terms of challenges with space and instructional staff, additional sections offered and increasing section sizes.
-
- Bizot (2017) observes “The enrollment growth in the mid-1980s is sometimes referred to as the “PC boom” and the enrollment growth in the late 1990s is sometimes referred to as the “dot-com boom.” The CRA suggests CS enrollment across the nation is surging due to the pervasiveness of computing in society and daily life. According to them, “students with interests in a variety of fields are beginning to understand that training in computer science is vital.”
-

COST AND RESOURCES:

Existing resources will be used to deliver the program. The certificate program requires six courses, and NDSU will offer them both online and face-to-face during the academic year, and online during the summer. The Computer Science department at NDSU does not require any additional resources to offer the program. Existing Laboratory resources at NDSU, although heavily utilized already, will be available to the program. The Blackboard system, established as a system-wide standard in the NDUS, will be used for all courses in the program. The Tegrity video capture system will be used where necessary. No new state funds will be required.

ACCREDITATION:

There is no national organization for accreditation of graduate certificate programs in Computer Science Education.

RELATIONSHIP TO THE INSTITUTION, SYSTEM AND REGION:

The NDSU Department of Computer Science is committed to the offering of graduate studies and programs through its strategic planning process. There are five existing courses that will be used directly in the program; each is currently available online. One new course will be developed: CSCI 701: Overview of Computer Science and Teaching and Learning.

The proposed program is the first at NDSU in Computer Science Education. In terms of faculty expertise, the department has the following strengths: 1) thirteen tenure/tenure-track faculty with a combined teaching experience in excess of 100 years; 2) another seven dedicated teaching professionals (lecturers and professors of practice); 3) award winning

assessment procedures as documented in the departmental assessment manual (https://www.ndsu.edu/fileadmin/cs/course_info/Appendix-20130920.docx).

With these faculty members committed to the delivery of the proposed program, the Department clearly has more than enough critical mass necessary to offer the Graduate Certificate. With nearly 200 graduate students in Computer Science and Software Engineering alone already in current programs, and the appeal of the certificate program to students from other departments, and to professionals already in the workforce, we believe that there will be immediate interest in the courses and the new program.

It should be noted that the NDSU School of Education offers an M. Ed. that is very flexible, with four core courses (12 education credits), 18 elective credits, and an action research project for 3-6 credits as the capstone. The 18 credits of Computer Science Education courses we propose could easily fit into that structure if a teacher wanted to also pursue the MEd. The core grad education courses are also all available online.

As with other graduate programs on campus, we welcome academic oversight of the program by the College of Graduate and Interdisciplinary Studies, with the College of Science and Mathematics and the Department of Computer Science being responsible for the administrative management of the program. This includes resources such as space and personnel as well as administrative oversight.

PROGRAM DELIVERY:

The certificate program requires six courses, and NDSU will offer them both online and face-to-face during the academic year, and online during the summer. Existing Laboratory resources at NDSU, although heavily utilized already, will be available to the program. The Blackboard system, established as a system-wide standard in the NDUS, will be used for all courses in the program. The Tegrity video capture system will be used where necessary.

PROGRAM VIABILITY:

After an initial period of growth we expect the program to sustain thirty students per year. There are nearly 200 high schools in North Dakota and nearly 500 high schools in Minnesota, and just providing one Computer Science Education certificate to each will sustain the program for several years.

While we expect to serve on-campus students, the availability of the distance delivery methods will also allow remote students to take the course work from their job-site, home, or anywhere with reasonable internet access. This will be a great convenience for serving students who are in-service teachers of Math, Science, or Business.

It is expected that 100% of the accepted students will complete this program within one calendar year.

PROGRAM ASSESSMENT/EVALUATION:

Formative evaluation will be implemented at the end of each academic term, designed to determine to what extent the project objectives and related activities are emerging in accordance with the stated goals. Summative evaluation will address the degree the intended project outcomes are met.

To assess the extent to which the project is making satisfactory progress toward the program objectives, we will examine data collected, materials developed, and conduct surveys during each academic term of the project. This evaluation process will be guided by the following predetermined questions, as well as questions that evolve during the development of the project.

Qualitative data will include interviews with project personnel and students, minutes from meetings, and copies of email communications. Quantitative data sources for evaluation will include: student attitudinal surveys (e.g. interest in continued study and earned credentials in computer science education), and pre/post student assessments.

PROGRAM DUPLICATION:

This program is the first in Computer Science Education at the graduate level, and thus there is no duplication in the North Dakota University System.

RELATIONSHIP TO THE ROUNDTABLE:

The Roundtable Report describes the NDUS vision of remaining connected, understood, relevant and accountable. This new Graduate Certificate in Computer Science Education, built on existing departmental resources, helps to achieve these objectives. The program will contribute to growth in the graduate segment, and will likely increase the diversity of the student population while meeting North Dakota's needs.

The Graduate Certificate in Computer Science Education is intended to serve motivated, high-achieving students by providing challenging courses and extra-curricular educational and graduate opportunities. The addition of the Graduate Certificate in Computer Science Education will allow more students to satisfy the workforce need for the material of the curriculum and help students to diversity their careers. By making the program accessible through online delivery there will be increased accessibility to educational excellence in a more flexible manner, per the 2000 Higher Education Round Table recommendations.

Economic Development Connections

There is a clear workforce need in North Dakota, the region, and nationally, as Computer Science (CS) is a field where continuous vigorous growth is expected in the coming decades. To foster a climate in which Computer Science fosters economic vitality, technology must be seen as a key player in economic development.

The ability to attract companies that drive economic and job growth might be affected should businesses hesitate to choose a location that has not prioritized computer technology and Computer Science education in the schools. It is not too far-fetched to speculate that people might avoid living and working in a region that does not intrinsically support an active and innovative technology sector. The proposed Graduate Certificate program will help address these challenges.

There is great potential for impacting the economic growth of North Dakota, particularly Computer Science education bolsters, supports, and indeed makes possible the intersecting components, Cyber Security, Unmanned Aerial Systems, and Big Data components of the Nexus ND initiative.

Education Excellence

As the curriculum for the certificate program was devised, close attention was paid to providing appropriate, high-quality, interdisciplinary training and skills development as well as a solid foundation and background in necessary Computer Science areas. Experiential and applied learning are expected outcomes of the program. For example, problem-centric assignments and team projects offer a creative platform for student work, often in collaboration with a faculty member. This effort can lead into publications, patents or viable software products. Through the interdisciplinary approach, the program will also help students to be lifelong learners, and to be knowledgeable, contributing members of a multicultural, global society.

Flexible and Responsive System

Computer Science education is already very important locally, regionally, nationally, and internationally. This certificate program is the first of its kind, in this area, in the North Dakota University System. The importance of Computer Science education in our increasingly interconnected digital world becomes more important every day. The proposed graduate certificate program offers a great deal of flexibility and responsiveness from the perspective of the employer, community, and students. The program is asynchronous, and will have pre-recorded lectures, and assignments for online Blackboard delivery across the NDUS system.

Accessible System

This graduate certificate program will be offered on-line year round, and in the traditional classroom setting during Summer. Lectures will also be digitally recorded to allow delivery to remote students using the existing successful distance delivery methods in place within Blackboard. This will allow the program to provide course offerings to place-bound learners.

Admission standards have been set for the new program and are shown below.

1. B.S. or equivalent degree with a GPA of 2.75 or more from an educational institution of recognized standing.
2. At least 12 semester hours or equivalent of coursework in Computer Science, Computer Engineering, Electrical Engineering, Software Engineering, Information Technology, or Information Systems.
3. One or more years of directly related teaching experience in Math, Science, or Business and successfully completing a preparatory course such as the VCSU-MEP offered at Valley City State University.

For students whose native language is not English, the English proficiency requirements for admission will follow standards established by the graduate school.

Funding and Rewards

No new resources are requested to deliver the requested program. The new program gains great efficiency by leveraging resources at NDSU. Over the longer term, there are plans to launch other related programs in Computer Science education, paralleling such undergraduate programs in the North Dakota University System as Biology Education, Mathematics Education, and Physics Education.

Sustaining the Vision

The program is of exceedingly high relevance to the state, given the large and growing demonstrated need for Computer Science education. The program fits well with virtually any projection of workforce needs into the foreseeable future.

Academic Request Budget Worksheet for Proposals Which DO NOT Involve New State Funds
Graduate Certificate in Computer Science Education

<u>Account Description</u>	<u>Year 1 7/17-6/18</u>	<u>Year 2 7/18-6/19</u>	<u>Year 3 7-19-6/20</u>	<u>Grand Total</u>
Faculty Salary, course #1	14,378.00	14,378.00	14,378.00	43,134.00
Faculty Salary, course #2	12,308.00	12,308.00	12,308.00	36,924.00
Fringe Benefits (30% on salaries)	8,005.80	8,005.80	8,005.80	24,017.40
TOTAL SALARIES AND BENEFITS	34,691.80	34,691.80	34,691.80	104,075.40
TOTAL OPERATING EXPENSES	0.00	0.00	0.00	0.00
Equipment/Startups	0.00	0.00	0.00	0.00
TOTAL PROGRAM EXPENSES	34,691.80	34,691.80	34,691.80	104,075.40
Total Access Fees (from additional DEDP SCHs and Prog Fees)	3,208.20	6,416.40	9,624.60	19,249.20
Total Base Tuition (avg ND and NRES), assume half w/waiver	17,035.80	34,071.60	51,107.40	102,214.80
Total other local funds (gifts, grants, etc.) <u>internally reallocated</u>	0.00	0.00	0.00	0.00
Total other local funds (gifts, grants, etc.) - <u>new revenues</u>	0.00	0.00	0.00	0.00
Less Tuition to Receiving Institution	0.00	0.00	0.00	0.00
Appropriated Funds - New	0.00	0.00	0.00	0.00
Appropriated Funds - Internally Reallocated	0.00	0.00	0.00	0.00
TOTAL PROJECTED REVENUE	20,244.00	40,488.00	60,732.00	121,464.00

CHs/yr	6		
yr #1 Students	10	yr #2 Students	20
		yr #3 Students	30
\$/CH res	309.46	\$/CH non-res	826.26

Program will require new state appropriations in future biennia.

No Yes

If yes, how much annually? \$ _____

Operating Expenses include: travel, communications, postage, telephone, office supplies, advertising, printing and duplicating.

January 4, 2018

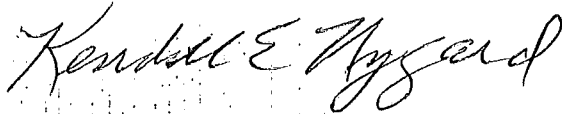
TO: Approval Committees and Administrators for new academic programs –
North Dakota University System

The Department of Computer Science at North Dakota State University is pleased to propose a Graduate Certificate Program in Computer Science Education. This program is a groundbreaking initiative that is precedent-setting. We note that Computer Science Education is a highly significant area of study that is projected to rapidly grow in importance in North Dakota and more broadly throughout our data and information centric society.

Six courses (18 graduate credits) are proposed as required for the Certificate. All will be available online during the Summer session, and available online and face-to-face during the academic year. One new course, CSCI 701: Overview of Computer Science and Teaching and Learning (3 Credits) will be developed and offered each Fall. Also offered each Fall is CSCI 713, Software Development Processes (3 Credits). Spring offerings include CSCI 724, Survey of Artificial Intelligence (3 Credits), and CSCI 765, Introduction to Database Systems (3 Credits). CSCI 773, Foundations of the Digital Enterprise (3 Credits) and CSCI 774, Topics of the Digital Enterprise (3 Credits) are offered every Summer.

The NDSU Department of Computer Science is enthused to be creating this new Graduate Certificate Program.

Sincerely,



Kendall E. Nygard, Ph. D.

Chair, Computer Science



Kenneth Magel, Ph. D.

Associate Chair, Computer Science

North Dakota University System

FY19 Internal Audit Plan
As of June 15, 2018

FY19 Available Hours:			
LAS	2000	-160	1840
DC	2000	-320	1680
MM	2000	0	2000
Total FY19 Avail. Hours			5520

Executive Summary

On a biennial basis, data is gathered from NDUS institutions, industry best practices and emerging risks to identify the internal audit focus.

General description of Audit, Assessment or Follow-up	Type (Audit, Assessment, Follow-up, Other)	Specific or System	Original FY18 Estimated Hours	Original FY19 Estimated Hours	Updated FY19 Estimated Hours	% of Total	Original to Updated FY19
Bookstore	Audit	Specific	0	120	0	0%	Deferred until FY20
Grant Compliance	Audit	Specific	0	240	0	0%	Grants were audited at 3 campuses during FY18
Athletics (compliance/financial)	Audit	Specific	720	720	0	0%	Specific planned audits will be rolled into the rotation of mandatory internal audits
Travel (include campus compare/trend analysis)	Audit	System	0	240	0	0%	Rolled into discretionary expense review, see below
Discretionary Expense Analysis (travel, prof. dev., etc)	Review	System	0	0	240	4%	NEW-changed to systemside review, and from travel only, to include other discretionary
Fraud Risk Info	Assessment	Specific	40	40	0	0%	Fraud Risk Assessment done annually, see below
Deferred Maintenance	Audit	Specific	0	120	0	0%	Specific planned audits will be rolled into the rotation of mandatory internal audits
Payroll Reconciliation	Audit	Specific	0	120	0	0%	Payroll Recs were audited at 3 campuses during FY18
Ticket Sales (Athletic and Non-Athletic)	Audit	Specific	160	0	0	0%	Specific planned audits will be rolled into the rotation of mandatory internal audits
Non-Business Office Cash Collections	Audit	Specific	120	120	0	0%	Specific planned audits will be rolled into the rotation of mandatory internal audits
Facilities - Capital Projects - process & control	Audit	System	120	0	240	4%	Moved from FY18 to FY19, and changed to systemwide review
Off-Campus Accounts (those run through boosters)	Audit	System	60	20	240	4%	Changed to systemwide review, and from FY18 to FY19
MiSU Athletic Summer Camp follow-up review	Follow-up	Specific	0	40	60	1%	
Title IX Policies	Audit	System	600	600	600	11%	
TrainND	Audit	System	240	0	600	11%	Changed to systemwide review, and from FY18 to FY19
NEW - Establish Continuous Audit (Vendor/Disburse)	Cont. Audit	System	0	0	300	5%	NEW - Added for FY19
Mandatory internal audit per year (10)*	Audit	Specific	2160	2160	2200	40%	UND, NDSCS will not utilize NDUS Internal Audit and includes one audit for NDUSO/CTS
Miscellaneous - (ad hoc, emergency, unannounced, unassigned)	Other	System	390	390	600	11%	Increased from original FY19 based on FY18 hours, subject to change
Total Audit Hours			4610	4930	5080	92%	
Other Audit Responsibilities							
Annual Fraud Risk Assessment	Assessment	System	25	25	25	0%	
Enterprise Risk Management Coordination	Assessment	System	100	100	25	0%	ERM is completed by management, NDUS Internal Audit Coordinates
Audit Planning	Other	System	25	25	25	0%	
Annual Internal Control Training Update	Other	System	20	20	20	0%	
Professional Development	Other	Specific	60	60	75	1%	Increased from original FY19 based in FY18 hours
Council/Committee/Board Meetings	Other	Specific	240	240	240	4%	
Total Non-Audit Hours			470	470	410	7%	
Total NDUS Audit Services Hours			5080	5400	5490	99%	



NDUS Compliance Office
 State Capitol – 600 E Boulevard Ave – Dept 215
 Bismarck ND 58505-0230
 Phone: 701.328.4150
 Email: karol.riedman@ndus.edu

**FY 2017-2018 Compliance Update
 Provided by Karol Riedman
 June 18, 2018**

FRAUD HOTLINE REPORTS (Administered by Eide Bailly)

- Total reports for 2017-18 = 18
- 16 investigated and closed; Remaining two in process and expected to be closed by June 30, 2018.

SYSTEM LOSS RUN REPORTS

- Total reports for FY 2017-18

CAMPUS	TOTAL CLAIMS LISTED	AUTO LIABILITY (STATE FLEET)	GENERAL LIABILITY	MEDICAL MALPRACTICE	CLAIMS STILL OPEN
BSC	2	1	1		1
DCB	0				0
DSU	6	1	5		2
LRSC	0				0
MaSC	0		1		0
MSU	2		2		2
NDSCS	1	1			0
NDSU	16	9	7		5
NDUSO	2		2		2
UND/MED	23	12	6	4	9
VCSU	2		2		1
WSC	0				0
TOTAL	54	24	26	4	22

DATA INCONSISTENCIES PROJECT

- Updated Status, 2015-17 HB 1003 Section 42: All 25 objectives have now been completed
- 2017-19 SB 2003 Section 38 listed additional items for study; assistance from Compliance has not been requested

EMPLOYEE TRAINING

- Integrated training and reporting system - Implementation of Blackboard LMS and additional complications discovered in the original objective have caused this project to be suspended.
- Mandatory annual Theft, Fraud and Code of Conduct training re-written and deployed; NDUS achieved 100% compliance at 3-31-2018
- Assisted in developing mandatory P-Card training; will monitor compliance.

ETHICS AND COMPLIANCE PROGRAM

- Updating and revision continues
- Masters of Public Administration completed June 2018. Capstone portfolio thesis considered the effect of an ethical organizational culture on compliance programs and activities in the higher education environment.

POLICIES AND PROCEDURES WORK 2017-18

- SBHE 401.2 Political Activities – on hold
- SBHE 803.3/NDUS 803.3 Surplus Property - on hold
- SBHE 603.1/NDUS 603.1 Title IX – on hold
- SBHE 607.5 Faculty Leave – SBHE voted to take no action
- SBHE 410 Responsible Conduct of Research – adopted
- Future policy/procedure - Standardization of required HIPAA vs FERPA designation documentation

OTHER MAJOR ACTIVITIES

- EPSCoR state jurisdictional research award – administrative issues
 - Facilitated re-organization of administrative office
 - Assisted in re-organizing state Steering Committee
 - Resource for state EPSCoR office and liaison between participants
- Major Investigations
 - DSU – report completed
 - NDSCS – Referred to outside forensic investigation firm
- Conducted various surveys at request of SBHE

PLANNED UPCOMING ACTIVITIES

- Continued advisory role with EPSCoR state office
- Consider cost/benefit to analyze, standardize, track HLC compliance matrix items
- Review of SBHE policies and NDUS procedures last updated prior to 2005 to determine need for review and updating
- Improve and streamline fraud investigation and compliance activities at campuses
- Develop an improved process for assessing, investigating and resolving complaints/reports to increase efficiency and relieve workload.