



# THE UNIVERSITY OF NEBRASKA

## BOARD OF REGENTS

MARCH 18, 2016

MEETING AGENDA



## NOTICE OF MEETING

Notice is hereby given that the Board of Regents of the University of Nebraska will meet in a publicly convened session on Friday, March 18, 2016, at 10:30 a.m. in the board room of Varner Hall, 3835 Holdrege Street, Lincoln, Nebraska.

An agenda of subjects to be considered at said meeting, kept on a continually current basis, is available for inspection in the office of the Corporation Secretary of the Board of Regents, Varner Hall, 3835 Holdrege Street, Lincoln, Nebraska, or at <http://nebraska.edu/board/agendas-and-minutes.html>

A copy of this notice will be delivered to the Lincoln Journal Star, the Omaha World-Herald, the Daily Nebraskan, the Gateway, the Antelope, the Kearney Hub, the Lincoln office of the Associated Press, members of the Board of Regents, and the President's Council of the University of Nebraska.

Dated: March 11, 2016

Carmen K. Maurer  
Corporation Secretary  
Board of Regents  
University of Nebraska

**AGENDA**  
**THE BOARD OF REGENTS**  
**OF THE UNIVERSITY OF NEBRASKA**  
**Varner Hall, 3835 Holdrege Street**  
**Lincoln, Nebraska 68583-0745**  
**Friday, March 18, 2016**  
**10:30 a.m.**

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES AND RATIFICATION OF ACTIONS TAKEN ON JANUARY 29, 2016

IV. KUDOS

*Chelsea M. Swarm, University of Nebraska at Kearney*  
*Carol Gaebler, University of Nebraska Medical Center*  
*Mike Connolly, University of Nebraska at Omaha*  
*Michaela Habe, University of Nebraska-Lincoln*

V. RESOLUTIONS

*Recognition for Regent Evan Calhoun, University of Nebraska at Kearney*  
*Recognition for Regent Thien Chau, University of Nebraska-Lincoln*  
*Recognition for Regent Brock Lewis, University of Nebraska at Omaha*  
*Recognition for Dara Troutman, Chief of Staff*

VI. HEARINGS

VII. PUBLIC COMMENT

The Standing Rules of the Board provide that any person who gives 24 hours' notice to the Corporation Secretary of the Board may speak to any item that is not on the agenda. In addition, any person may appear and address the Board of Regents on any item on the agenda for this meeting. Each person will be given up to five minutes to make his or her remarks. Public comment will be limited to a period of 30 minutes.

VIII. UNIVERSITY ADMINISTRATIVE AGENDA

A. ACADEMIC AFFAIRS

1. Approval is requested to create a Bachelor of Science in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at the University of Nebraska-Lincoln Addendum VIII-A-1
2. Approval is requested to establish the Center for Patient, Family, and Community Engagement in Chronic Care Management (CCCM) in the College of Nursing at the University of Nebraska Medical Center Addendum VIII-A-2

B. BUSINESS AFFAIRS

University of Nebraska-Lincoln

1. Approve the sole source purchase of an Ion Trap/Triple Quadrupole Mass Spectrometer Addendum VIII-B-1

2. Approve the Fund B University Program and Facilities Fees (UPFF) 2016-17 Allocation at the University of Nebraska-Lincoln Addendum VIII-B-2

University of Nebraska at Kearney

3. Approve the Fund B, University Program and Facilities Fee (UPFF) 2016-17 Allocation for the University of Nebraska at Kearney Addendum VIII-B-3

University of Nebraska Medical Center

4. Approve the Fund B, University Program and Facilities Fee (UPFF) 2016-17 Allocation for the University of Nebraska Medical Center Addendum VIII-B-4
5. Approve the sole source purchase of four patient simulators for Mobile Simulation Labs Addendum VIII-B-5
6. Approve the purchase of network switches Addendum VIII-B-6
7. Approve the sole source purchase of 3D and virtual reality development hardware/software and stereoscopic CADWall Addendum VIII-B-7

University of Nebraska at Omaha

8. Approve the Fund B, University Program and Facilities Fees (UPFF) 2016-17 Allocation for the University of Nebraska at Omaha Addendum VIII-B-8

Additional Item – University of Nebraska at Omaha

9. Approve the amended and restated University Rights Agreement between the University of Nebraska at Omaha and Learfield through fiscal year 2026 Addendum VIII-B-9

C. FOR INFORMATION ONLY

1. University of Nebraska Strategic Planning Framework Addendum VIII-C-1
2. University of Nebraska Strategic Framework Accountability Measures Addendum VIII-C-2
3. Calendar of establishing and reporting accountability measures Addendum VIII-C-3
4. University of Nebraska Strategic Dashboard Indicators Addendum VIII-C-4
5. Board of Regents agenda items related to the University of Nebraska Strategic Framework Addendum VIII-C-5
6. Amend Section 2.11 of the *Bylaws of the Board of Regents* of the University of Nebraska. This item is presented for information only and will be brought back to the Board for approval at its next meeting. Addendum VIII-C-6

D. REPORTS

1. Quarterly Personnel Report Addendum VIII-D-1
2. Spring Student Credit Hour and Summary Enrollment reports Addendum VIII-D-2
3. Renaming the Division of Clinical Laboratory Science to the Division of Medical Laboratory Science in the College of Allied Health Professions at the University of Nebraska Medical Center Addendum VIII-D-3
4. Quarterly Status of Capital Construction Projects Addendum VIII-D-4
5. Status Report of Six-Year Capital Plan Addendum VIII-D-5
6. Members of the University of Nebraska Project Review Board Pool Addendum VIII-D-6
7. Business Affairs Committee Approval of Intermediate Design Reports: UNK University Village Housing, and UNL Library Depository Retrieval Facility Addition Addendum VIII-D-7
8. Quarterly Report of Gifts, Grants & Contracts Addendum VIII-D-8
9. Report of Bids and Contracts Addendum VIII-D-9
10. Semi-annual Report of Licenses Addendum VIII-D-10

11. Financial Aid Strategic Framework Accountability Measure Results  
[1-a-iii and 3-b-ii] Addendum VIII-D-11
12. Results for the Strategic Framework Graduation Rate Accountability Measures  
[1-b-iii] Addendum VIII-D-12
13. Strategic Framework Report on Entrepreneurship [5-d] Addendum VIII-D-13
14. Strategic Framework report on Workforce Development Opportunities and  
Academic Program Alignment [3-h-i & iii] Addendum VIII-D-14
15. Strategic Framework Report on Research [4-a-i] Addendum VIII-D-15
16. Annual Fire and Safety Report Addendum VIII-D-16

IX. ADDITIONAL BUSINESS

## **VIII. UNIVERSITY ADMINISTRATIVE AGENDA**

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15. Strategic Framework Report on Research [4-a-i] Addendum VIII-D-15
16. Annual Fire and Safety Report Addendum VIII-D-16

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Creation of a Bachelor of Science (BS) in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at the University of Nebraska-Lincoln (UNL)

RECOMMENDED ACTION: Approval is requested to create a Bachelor of Science in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at UNL

PREVIOUS ACTION: March 12, 1988 – The Board approved the reorganization of the Department of Computer Science into the Department of Computer Science and Engineering at UNL.

EXPLANATION: Software engineering as a field of study and as a profession has grown significantly over the last several years. Today, 22 degree programs exist in the U.S. and several research-intensive institutions are working to add them. UNL would be the first Big Ten university to create a specific software engineering undergraduate major.

Faculty involved in UNL's strong software engineering research program will create an exceptional undergraduate program that will graduate highly-trained software engineers that are in demand nationally and in Nebraska. Because of such demand, it is expected that the program will grow very quickly and will attract many students across the region to UNL. The program will seek ABET accreditation. The Executive Vice President and Provost has determined, like most UNL engineering programs, that accreditation standards coupled with UNL's general education requirements cannot be met within a 120 credit hour program. The BS in Software Engineering will require 124 credit hours.

This proposal has been reviewed by the Council of Academic Officers. This proposal also has been reviewed and recommended for approval by the Academic Affairs Committee.

PROGRAM COST: \$3,107,109 over 5 years (details on proposal page numbers 37 and 38)

SOURCE OF FUNDS: Resources committed to the College of Engineering from UNL's Senior Vice Chancellor for Academic Affairs will support the new faculty hires and teaching assistants. Current College of Engineering funding will be used to support operating expenses; as program growth allows, additional needs will be met using tuition and currently approved differential tuition allocations.

SPONSORS:

Ronnie Green  
Vice President, Agriculture and Natural Resources, University of Nebraska  
Interim Senior Vice Chancellor for Academic Affairs  
Harlan Vice Chancellor, Institute of Agriculture and Natural Resources,  
University of Nebraska-Lincoln

Harvey Perlman, Chancellor  
University of Nebraska-Lincoln

RECOMMENDED:

Susan M. Fritz  
Executive Vice President and Provost

DATE:

February 26, 2016

# Proposal to Create a Major in Software Engineering

## I. Descriptive Information

**Name of Institution Proposing the Program:** University of Nebraska-Lincoln

**Name of the Major Proposed:** Software Engineering

**Degrees/Credentials to be Awarded:** Bachelor of Science in Software Engineering

**Other Undergraduate Programs Offered in This Field by University of Nebraska:** None. (The UNO College of Information Science and Technology offers an integrated undergraduate/masters degree program with a concentration in Software Engineering.)

**CIP Code:** 14.0903

**Administrative Units for the Program:** The UNL Department of Computer Science and Engineering within the College of Engineering will administer the program.

**Proposed Delivery Site and Type of Delivery:** University of Nebraska-Lincoln campus

**Date Approved By Governing Board:** TBD

**Proposed Date the Program will be Initiated:** Upon final approval

### **Description and Purpose of the Proposed Program:**

Software Engineering is the study and application of the rigorous engineering practices required to specify, architect, develop, analyze, test, and maintain software systems. Its importance as a field of study and practice has increased significantly as software systems have grown in size, complexity and pervasiveness. Software Engineering goes beyond programming, i.e., writing code, to ensure software systems are constructed to satisfy the many requirements that customers define for them, that they behave correctly, reliably and efficiently, and that they are affordable to maintain.

Software Engineers serve in both technical and management roles. They generally work as part of a larger team, and often serve as a bridge between the business units and the software systems engineering staff. Working closely with technical specialists, e.g., application developers and database analysts, and with business specialists, e.g., managers, business analysts, and clients, Software Engineers help organizations build and maintain software systems of all sizes. They analyze user needs for new systems and changes to existing software. They also design, architect and construct software systems and make changes to systems to fix defects and add new features. Software engineers are also responsible for testing and verifying software for correctness and other features.

In 2012, over one million software engineers were employed in the US, and a faster than average growth rate (22%) is projected through 2022 for jobs requiring bachelor-level degrees in software development [2]. Nebraska, and Lincoln in particular, have recently witnessed a sharp rise in the demand for more highly skilled software developers. According to the 2013 Bureau of Labor and

Statistics OES survey, the employment rates for Software System Developers in Lincoln was up 12%, and 8% for Software Application Developers over the past three years [3].

Originally a field within Computer Science, Software Engineering has evolved to become a field in its own right, applying both computing and engineering principles to the creation and maintenance of high-quality software systems in a systematic, controlled and efficient manner. The two key professional organizations, IEEE and ACM, emphasize the need for degree programs in Software Engineering and specify different model curricula for each. In May 2004, ACM and IEEE first issued a joint report on a model curriculum for developing undergraduate degree programs in Software Engineering. The report was recently updated to reflect an improved understanding of the discipline of software engineering as it has evolved over the last ten years [1]. Furthermore, ABET, the key organization responsible for accrediting engineering programs, recognizes Software Engineering as a separate engineering discipline and has established accreditation guidelines for it.

The topics covered by Software Engineering are diverse and include many of the same topics as the field of Computer Science, but with a greater emphasis on the software development process. The IEEE Guide to Software Engineering Body of Knowledge [4] divides Software Engineering into 15 Knowledge Areas: (1) Software Requirements, (2) Software Design, (3) Software Construction, (4) Software Testing, (5) Software Maintenance, (6) Software Configuration Management, (7) Software Engineering Management, (8) Software Engineering Process, (9) Software Engineering Models and Methods, (10) Software Quality, (11) Software Engineering Professional Practice, (12) Software Engineering Economics, (13) Computing Foundations, (14) Mathematical Foundations, and (15) Engineering Foundations.

Although many of the software engineering topics can be (and are) briefly covered in the one-semester Software Engineering course offered by most Computer Science programs, it is not possible to provide the depth of coverage necessary to adequately prepare students for a career as a software engineer.

To support Nebraska industry and remain at the forefront of engineering disciplines, it is important for the College of Engineering at the University of Nebraska-Lincoln to establish an undergraduate program in Software Engineering that will provide students with a strong foundation in computer science, math, and software engineering, to enable them to become effective software engineers and to lead software engineering efforts. The UNL Department of Computer Science and Engineering is uniquely positioned to deliver this program due to its concentration of world-class Software Engineering scholars<sup>1</sup>.

The coursework for the proposed major in Software Engineering (Bachelor of Science in Software Engineering) at UNL consists of 124 credit hours of study. Seventy-nine hours cover core Computer Science and Software Engineering courses: 52 hours of required coursework (shown below in Table A), 15 hours of technical electives, and 12 hours of a two-year capstone course sequence which provides students with hands-on experience on multiple real-world projects while being mentored by Computer Science and Engineering faculty.

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<sup>1</sup> Cumulative data from Ren and Taylor's 2007 Communications of the ACM article "Automatic and versatile publications ranking for research institutions and scholars" places UNL's group in the top-5 in the world.

**Table A: Required Computer Science and Software Engineering Courses (52 hours)**

Course Number	Title	Credits	Development
SOFT 160	Software Engineering I	4	New course
SOFT 161	Software Engineering II	4	New course
SOFT 260	Software Engineering III	4	New course
SOFT 261	Software Engineering IV	4	New course
SOFT 360	Software Engineering Mentoring and Leadership	1	New course
SOFT 461	Advanced Topics in Software Engineering	3	Existing course*
SOFT 466	Software Design and Architecture	3	New course
SOFT 467	Testing, Verification and Analysis	3	New course
SOFT 468	Requirements Elicitation, Modeling and Analysis	3	New course
CSCE 10	Introduction to CSE	0	Existing course
CSCE 230	Computer Organization	4	Existing course
CSCE 235	Introduction to Discrete Structures	3	Existing course
CSCE 322	Programming Language Concepts	3	Existing course
CSCE 378	Human-Computer Interaction	3	Existing course
CSCE 411	Data Modeling for Systems Development	3	Existing course
CSCE 423	Design and Analysis of Algorithms	3	Existing course
CSCE 451	Operating Systems Principles	3	Existing course
CSCE 491	Internship in Computing Practice	1	Existing course

*\*SOFT 461 will be cross-listed with existing course CSCE 461 to avoid naming conflicts with the new Software Engineering course, SOFT 161.*

As an information-based engineering discipline, the proposed software engineering major also requires students to complete 18 hours of coursework in mathematics and 12 hours of science course work, of which at least one science course must include a laboratory. In contrast to physics-based engineering disciplines, the training of Software Engineers calls for a background in mathematics to help them organize and process representations that characterize potentially large corpuses of data. For this reason, student mastery of techniques from discrete mathematics, linear algebra, probability and statistics is essential. To accommodate courses on these topics, the proposed curriculum eliminates requirements for upper level calculus and differential equations (though they can still be taken as electives). Software Engineering majors take an additional 15 hours of coursework to satisfy Achievement-Centered Education (ACE) institutional objectives. All Software Engineering majors are required to take a 1 credit hour (paid or unpaid) internship.

Admission requirements for the major in Software Engineering are the same as the admission requirements for the College of Engineering at the University of Nebraska-Lincoln. Once students are admitted to the College, students must go through the Professional Admission Process, which is automatically performed for qualifying students at the end of the sophomore year. In order to be considered for Professional Admission to the Software Engineering program, students must receive at least a C+ in SOFT 160, SOFT 161, SOFT 260, SOFT 261, CSCE 235, MATH 106 and MATH 107 (or their equivalents), and have a GPA of at least 2.5 (semester and cumulative). Table B shows a sample 4-year plan for a student majoring in Software Engineering under the proposed program.

**Table B: Sample Program of Study for the Software Engineering Major**

First Semester	Credits
SOFT 160: Software Engineering I	4
CSCE 10: Introduction to CSE	0
MATH 106: Calculus I	5
Natural Sciences course	4
ACE Student Learning Outcome 5 course	3
<b>Total</b>	<b>16</b>

Second Semester	Credits
SOFT 161: Software Engineering II	4
CSCE 235: Discrete Structures	3
MATH 107: Calculus II	4
Natural Sciences course with Lab	4
<b>Total</b>	<b>15</b>

Third Semester	Credits
SOFT 260: Software Engineering III	4
CSCE 378: Human-Computer Interaction	3
ENGR 20: Sophomore Engineering Seminar	0
Natural Sciences course	4
CSCE 230: Computer Organization	4
<b>Total</b>	<b>15</b>

Fourth Semester	Credits
SOFT 261: Software Engineering IV	4
CSCE 322: Programming Language Concepts	3
CSCE 451: Operating Systems Principles	3
MATH 314: Linear Algebra	3
STAT 380: Statistics and Applications	3
<b>Total</b>	<b>16</b>

Fifth Semester	Credits
CSCE 493: Innovation Lab Project	3
CSCE 411: Data Modeling for Systems Development	3
CSCE 423: Design and Analysis of Algorithms	3
Math/Statistic Elective course	3
JGEN 200: Technical Communication I	3
SOFT 360: Software Engineering Mentoring and Leadership	1
<b>Total</b>	<b>16</b>

Sixth Semester	Credits
CSCE 493: Innovation Lab Project	3
SOFT 461: Advanced Topics in Software Engineering	3
SOFT 466: Software Design and Architecture	3
CSCE/SOFT Technical Elective course	3
CSCE/SOFT Technical Elective course	3
CSCE 491: Internship in Computing Practice	1
<b>Total</b>	<b>16</b>

Seventh Semester	Credits
CSCE 486: Computer Science Professional Development	3
SOFT 467: Testing, Verification and Analysis	3
ACE Student Learning Outcome 6 course	3
CSCE/SOFT Technical Elective course	3
CSCE/SOFT Technical Elective course	3
<b>Total</b>	<b>15</b>

Eighth Semester	Credits
CSCE 487: Computer Science Senior Design Project	3
SOFT 468: Requirements Elicitation, Modeling and Analysis	3
ACE Student Learning Outcome 7 course	3
ACE Student Learning Outcome 9 course	3
CSCE/SOFT Technical Elective course	3
<b>Total</b>	<b>15</b>

Several schools in the Big Ten conference offer a *graduate* degree program in Software Engineering or a Software Engineering certificate, or they offer a focus area in Software Engineering for students pursuing an undergraduate degree in Computer Science. Other schools have a strong research presence in Software Engineering. None of the Big Ten schools, however, offer an undergraduate degree program in Software Engineering. Similarly, although UNO does not offer an undergraduate program in Software Engineering, they do offer a set of graduate-level courses covering fundamental and advanced principles in software development to support a concentration in software engineering in their Integrated Undergraduate/Graduate program. Table C summarizes the Software Engineering programs at the Big Ten institutions.

**Table C: Software Engineering Presence in Big Ten Schools**

School	Software Engineering Presence
University of Illinois at Urbana-Champaign	Software Engineering certificate in Computer Science undergraduate program. Strong Software Engineering research presence.
Indiana University	M.S. in Human-Computer Interaction (a sub-field of Software Engineering).
University of Iowa	Software Engineering focus area in Computer Science undergraduate program.
University of Michigan	No Software Engineering programs.
Michigan State University	Strong Software Engineering research presence.
University of Minnesota	M.S. in Software Engineering. Strong Software Engineering research presence.
Northwestern University	No Software Engineering programs.
The Ohio State University	Software Engineering focus area in Computer Science undergraduate program. Strong Software Engineering research presence.
Pennsylvania State University	Online M.S. in Software Engineering.
Purdue University	Software Engineering track in Computer Science undergraduate program. Strong Software Engineering research presence.
University of Wisconsin-Madison	No Software Engineering programs.

*The University of Nebraska-Lincoln will be the first Big Ten school and the first school in Nebraska to offer a baccalaureate program in Software Engineering that is taught by one of the top academic software engineering research groups in the world who also have over a decade of experience in delivering project-centered software engineering training in the Raikes School of Computer Science and Management.*

## II. Review Criteria

### A. Centrality to Role and Mission of the Institution

The proposed program is consistent with the expectations of the business community, the plans of the College of Engineering, and the strategic plan of UNL. The proposed Software Engineering program will offer an academic major with high salary potential and much faster than average growth rate in job opportunities [2]. It will combine the latest best practices in research-based instructional methods with hands-on experience through real-world projects, classroom interactions and internships with industry partners in order to provide students with the education



and training most needed by software engineers to support Nebraska industry. The proposed program complements the existing Computer Science and Computer Engineering programs offered by the University of Nebraska by educating students on the engineering aspects of developing and maintaining evolving complex software systems.

**B. Evidence of Need and Demand**

1. Need for the Software Engineering Program

In recent decades, the number of software engineering job opportunities has grown to such an extent that industry has been forced to hire individuals with little or no formal training in software development. The need for graduates who are skilled in the foundations and modern practice of design, construction, and maintenance of large software-intensive systems is substantial and is projected to increase over the coming decades as software becomes increasingly more prevalent, and more complex systems are developed. Nebraska, and Lincoln in particular, have recently witnessed a sharp rise in the demand for more highly skilled software developers. According to the 2013 Bureau of Labor and Statistics OES survey, the employment rates for Software System developers in Lincoln was up 12%, and 8% for Software Application Developers over the past three years [3], and the projected *annual* job openings in Nebraska for Software Application Developers is estimated at 160 over the next seven years [3].

The proposed software engineering curriculum will educate and train Software Engineering majors to apply rigorous software engineering practices and principles and will prepare students to serve in key industry roles such as systems analysts, software architects, quality assurance engineers, application developers, systems software developers, user interface designers, software project managers, and software development managers. An entry-level software engineer earns on average \$71,262 annually [5]. Table D shows the median annual pay, number of jobs, and projected growth rate for several employment titles that a software engineer may have, as reported by the U.S. Department of Labor, Occupational Outlook Handbook (2014-15 Edition).

**Table D: Employment Statistics from the U.S. Department of Labor**

Title	Median Annual Pay in 2012	Number of Jobs in 2012	Projected Growth Rate 2012-2022
Systems Software Developer	\$99,000	405,000	20%
Application Software Developer	\$90,060	613,000	23%
Computer Systems Analyst	\$79,680	520,600	25%
Programmer	\$74,280	343,700	8%
Computer and Information System Managers	\$120,950	332,700	15%

Although software engineers are often employed by companies whose business products are software or software services, they are also employed by a wide range of Nebraska-based firms whose primary business objective is not software, but instead, manufacturing, insurance, information processing, etc.

Examples of Nebraska-based companies in which software engineering plays a vital role in their success include: *Sandhills Publishing, Hudl, Design Data, Fiserv, Kiewit Corporation, Professional Research Consultants, Firespring, Pen-Link, Nebraska Global, Opendorse, Nelnet, Centrix Solutions,*

*Zillow, VM Innovations, Stone Fin Technology, Software Technology Inc., Information Analytics, and Chronic Care Solutions.* Our discussions with leadership in each of these companies indicates a strong desire for more and better software engineering education on their part and letters from these companies, in Appendix A, attest to their support for the proposed curriculum.

The proposed Software Engineering major will build on the many strong partnerships that already exist between the UNL Department of Computer Science and Engineering and Nebraska companies, as well as new partnerships. As the letters of support in Appendix A illustrate, Nebraska industry support for the new program is strong and our industry partners are willing to get involved to help create an innovative program that will help address the acute shortage of software engineers and contribute to Nebraska economic growth. Several excerpts taken from the letters of support illustrate the level of support and commitment from these companies:

*Doug Durham, Principle & CTO for Nebraska Global states that the proposed program is “not only a game-changer for our local community but has the potential to differentiate UNL CSE from every other CSE program across the country...I believe the approach you are taking with this program is not only novel, but could disrupt how people view higher education’s approach to training software engineers.” He adds “I am looking forward to rolling up my sleeves and helping you get this program launched and successful.”*

*And, Kris Lappala, Chief Information Officer at Kiewit Corporation states “This four-year software engineering program would be a significant help to meet the growing demand we face in filling key roles across our organization. We are regularly looking for quality candidates, especially with the unemployment rate for technologists in the region at less than 1%...A program at the University of Nebraska-Lincoln would help alleviate our challenges and cultivate excellent talent that we can develop at our strong companies in our state.”*

We have also solicited feedback on the proposed program from the Computer Science and Engineering Industry Advisory Panel, and from various organizations during site visits. The response has been overwhelmingly positive, and management at every organization has pledged to support the program through hands on time with the students, e.g., facilities tours, internships, and guest lectures to share state-of-the-practice techniques and processes.

## 2. Demand for the Program

Fueled by a strong job market for technology specialists to develop and maintain large software systems, recent years have seen an increased demand for Software Engineering programs. The increasing numbers of student inquiries during campus visits, comments from current students, and other information gathered by academic advisors indicates strong interest in a Software Engineering major. Enrollment in the UNL Department of Computer Science and Engineering is up 65% from 2011, indicating strong demand from students for a computing education. While we anticipate that a Software Engineering major may cause some of our current students to change majors to the new program, it is expected that most of the students will be new students who otherwise would not have selected UNL for their undergraduate studies. Students in Nebraska as well as students in several metropolitan centers located not far from UNL, e.g., Kansas City and Denver, are prime candidates for this program since they do not currently have access to a Software Engineering program locally. Based on discussions with the Raikes School, we also believe the program will be appealing to many of their students who already receive training in software engineering practices as part of the Design Studio course.

The proposed Software Engineering program will be attractive to students seeking an innovative and experience-based curriculum. Existing Software Engineering programs largely follow a computer science curriculum that is extended to also train students in the Software Engineering Body of Knowledge – an ISO/IEC international standard that defines the essential knowledge of a skilled practicing software developer. Many of the programs operate out of institutions with a long history of cooperative education programs, where students spend a significant amount of time working in industry to reinforce their knowledge and skills. Our investigation into these programs reveals innovation in the mid-2000s, but a tendency towards stagnation due, in part, to curricula that were not designed to be easily updated and, as a result, have not kept pace with the many rapid advances in software engineering principles and practices. Many of these programs have also not taken full advantage of recent advances in instructional methodologies. The proposed Software Engineering program at UNL will address student demand for an innovative and experience-based curriculum by leveraging our top-ranked Software Engineering faculty, and over a decade of experience in delivering project-centered software engineering education and training in the Raikes School. The proposed program will combine the latest best practices in research-based instructional methods with hands-on experience through real-world projects and internships. Leveraging state-of-the-art equipment and facilities, the new Software Engineering program will deliver the foundations and skills necessary to prepare students to engineer large-scale software systems.

Based on available information, the number of students expected to enroll in the program is 38-42 students per cohort after the initial years as shown in Table E. The minimum number of students to make the program viable is 25 students per cohort. The estimates are expected to vary within 10% to account for dropouts and transfers, and we fully expect more students to be interested in the program once it is established based on the limited supply of qualified software engineers and the demand from industry. To expand the program to allow enrollments to grow beyond the numbers shown in Table E will require additional investments in the program for faculty, TA support and physical resources.

**Table E: Projected Enrollment Figures in the Proposed Program**

Year 1 2016-2017	Year 2 2017-2018	Year 3 2018-2019	Year 4 2019-2020	Year 5 2020-2021
29	69	109	149	160

### C. Adequacy of Resources

Based on current and planned resources, the Software Engineering Program is designed to graduate approximately 40 students per year once it is fully implemented.

#### 1. Faculty and Staff Resources

The Department of Computer Science and Engineering currently has five Tenure track faculty associated with the Software Engineering program: Matthew Dwyer, Gregg Rothermel, Sebastian Elbaum, Myra Cohen, and Witty Srisa-an, and one Professor of Practice faculty, Suzette Person, who is the Director of the Software Engineering program. The Department also has one vacant Tenure track faculty position in the Software Engineering group (recently vacated by Anita Sarma). We expect to fill this position by the start of the new program (in addition to the new faculty hires discussed below).

With the new Software Engineering major, the CSE department will shift offerings of advanced undergraduate SE courses from the CS and CE curriculum to the new SE curriculum. This will redirect the undergraduate teaching capacity of the current SE faculty, mentioned above, to align with the delivery of the SE curriculum. Additional teaching needs for the SE curriculum will be met with new hires.

Three additional faculty positions (two Tenure track and one Professor of Practice) are planned to support the new program. Average course load for Tenure track faculty is three courses per year. The average course load for a Professor of Practice is six courses per year. Four additional Graduate Teaching Assistant (GTA) positions are also planned and two new staff FTEs (one to support the capstone course and one to provide systems administration support for the new program). Beyond these positions, support for additional faculty lines, teaching assistants, and support staff would be demonstrated through student enrollment in the major, and credit hour production. Administrative support for the program will be handled through existing personnel supported by the Department of Computer Science and Engineering.

## 2. Physical Facilities

The Software Engineering program will be delivered on the UNL campus. The Department of Computer Science and Engineering utilizes the classroom space in Avery Hall as well as other buildings on campus. No additional physical space is currently required.

## 3. Instructional Equipment and Informational Resources

No additional instructional equipment or informational resources is required to support the program as described in the proposal. Students in the program will be required to lease, own, or have access to a laptop for use in the classroom throughout their course of study.

## 4. Budget Projections

Budget projections for the first five years of the program are shown in Tables 1 and 2. Projected expenses include new faculty, GTAs and staff. Revenue sources include funding received from the UNL Senior Vice Chancellor for Academic Affairs (SVCAA) and expected tuition and fees from increased enrollment and differential tuition. Refer to the footnotes in each table for an explanation of the projections.

**TABLE 1: PROJECTED EXPENSES - Bachelor of Science in Software Engineering**

Personnel <sup>1</sup>	FY 2016 Year 1		FY 2017 Year 2		FY 2018 Year 3		FY 2019 Year 4		FY 2020 Year 5		Total Cost
	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	
Faculty <sup>2</sup>	3	\$338,400	3	\$348,552	3	\$359,009	3	\$369,779	3	\$380,872	\$1,796,612
Professional	0		0		0		0		0		\$0
Graduate assistants <sup>3</sup>	2	\$56,668	2	\$58,368	4	\$120,892	4	\$124,876	4	\$129,012	\$489,816
Support staff <sup>4</sup>	1	\$58,500	2	\$164,255	2	\$169,183	2	\$174,258	2	\$179,486	\$745,682
Subtotal	6	\$453,568	7	\$571,175	9	\$649,083	9	\$668,913	9	\$689,370	\$3,032,109
<b>Operating</b>											
General Operating <sup>5</sup>		\$15,000		\$15,000		\$15,000		\$15,000		\$15,000	\$75,000
Equipment											\$0
New or renovated space											\$0
Library/Information Resources											\$0
Other											\$0
Subtotal		\$15,000		\$15,000		\$15,000		\$15,000		\$15,000	\$75,000
<b>Total Expenses</b>		\$468,568		\$586,175		\$664,083		\$683,913		\$704,370	<b>\$3,107,109</b>

<sup>1</sup>Yearly personnel expenses are increased by 3% annually for years 2-5 from the year 1 baseline.

<sup>2</sup>Funds to hire two Assistant Professors (estimated starting salary \$90K-\$95K) and one Assistant Professor of Practice (estimated starting salary \$72K-\$76K), plus benefits. In addition to the new hires, the current SE faculty allocate a portion of their teaching capacity to the new program, e.g., offerings of SE courses in CS and CE will be reduced and that capacity directed to this new SE degree program.

<sup>3</sup> Hire two Graduate Teaching Assistants (GTAs) to support in-class lab-based instruction, an additional two GTAs will be hired as the program builds out.

<sup>4</sup>Hire an entry level computing staff member to exclusively support undergraduates (laptop setup, infrastructure, etc.). In year 2, hire a staff member to support the capstone courses required during Junior and Senior years of program.

<sup>5</sup>Operating budget will be used for recruiting, outreach, industry programs, and day-to-day operations specific to the new Software Engineering program.

**TABLE 2: REVENUE SOURCES FOR PROJECTED EXPENSES - Bachelor of Science in Software Engineering**

	FY2016		FY2017		FY2018		FY2019		FY2020		Total
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9		
Allocated UNL Funds for CSE <sup>1</sup>	\$395,068	\$	406,920	\$	419,128	\$	431,701	\$	444,653		\$2,097,470
Required New Public Funds											
1. State Funds											
2. Local Tax Funds (community colleges)											
Gross Tuition/Gross Differential Tuition <sup>2</sup>	\$404,131	\$990,884	\$1,600,945	\$2,235,012	\$2,456,358						\$7,687,330
Other Funding											
Total Revenue	\$799,199	\$1,397,804	\$2,020,073	\$2,666,714	\$2,901,010						\$9,784,800

<sup>1</sup>UNL's Senior Vice Chancellor for Academic Affairs has allocated funds for one Asst. Professor of Practice position, two new Asst. Professor hires, and two Teaching Assistants. Yearly personnel expenses are increased by 3% annually for years 2-5 from the year 1 baseline. As program growth requires, additional hires will be supported with college tuition and differential tuition allocations.

<sup>2</sup> Gross tuition estimates are based on the table below.

Student Type <sup>1</sup>	Projected Tuition Revenue									
	Year 1		Year 2		Year 3		Year 4		Year 5	
	R	N	R	N	R	N	R	N	R	N
Estimated Gross Tuition <sup>2</sup>	\$8,693.44	\$25,584.69	\$8,867.31	\$26,096.38	\$9,044.65	\$26,618.31	\$9,225.55	\$27,150.68	\$9,410.06	\$27,693.69
Estimated Enrollment <sup>3</sup>	29	9	69	22	109	74	149	101	48	160
Est. Enrollment by Type	20	9	47	22	74	35	101	48	108	52
Estimated Gross Tuition	\$173,868.75	\$230,262.19	\$416,763.39	\$574,120.39	\$669,304.28	\$931,640.81	\$931,760.09	\$1,303,232.40	\$1,016,286.08	\$1,440,071.80
Est. Total Gross Tuition Revenue	\$404,130.94	\$990,883.78	\$1,600,945.09	\$2,235,012.49	\$2,456,357.89					

**Est. 5 Year Gross Tuition Revenue \$7,687,330.18**

<sup>1</sup> R=Resident, N=Non-Resident

<sup>2</sup> Tuition estimates include differential tuition for CSCE and SOFT courses; annual tuition increases of 2% are used for years 2-5.

<sup>3</sup> Expected steady state enrollment, by year 5, is 160 students (40 in each class).

#### D. Avoidance of Unnecessary Duplication

The proposed program will be the first Bachelor of Science degree program in Software Engineering offered in the State of Nebraska. UNO, UNK and UNL all offer a bachelors degree in Computer Science, but each institution has developed a unique set of programs that build on synergies with their local community.

The UNO College of Information Science & Technology offers a diverse set of bachelors degrees that provide foundational knowledge in computing and that connect computing to disciplines whose progress can be accelerated by its application. UNO offers degrees in: *Computer Science*, *MIS* (emphasizing computing in the context of a business or organization), *Bioinformatics* (emphasizing computing for the life sciences), *Information Assurance* (emphasizing privacy and security in modern software and networked systems), and *IT* (combing training in core Computer Science and MIS with disciplinary expertise and innovation). These offerings create valuable ties to UNMC, through bioinformatics, and to STRATCOM, through information assurance, for example. Although the UNO College of Information Science & Technology does not offer a bachelors degree in software engineering, they do offer a set of graduate-level courses covering fundamental and advanced principles in software development to support a concentration in software engineering in their Integrated Undergraduate/Graduate program.

UNK's Department of Computer Science & Information Technology offers bachelors degrees in: *Computer Science* and *IT* (blending computing knowledge with applied training in systems administration, security, and web-based systems). The UNK IT program is tailored to provide experts for businesses in central Nebraska that have a strong need for well-rounded IT professionals.

The UNL Department of Computer Science and Engineering seeks to complement its existing *Computer Science* and *Computer Engineering* degree programs by leveraging its highly-regarded software engineering research faculty and its unique position as the only computing department in an Engineering college in Nebraska, to offer a state-of-the-art Software Engineering degree program with a strong engineering emphasis. The proposed program will be unique in that it will be the only SE degree program in the country that:

1. Teaches an "SE first" approach to computing, i.e., it emphasizes the system context and engineering team as the setting within which computing principles are taught,
2. Requires multiple year-long project experiences,
3. Integrates state-of-the-practice knowledge, delivered by working professionals, with state-of-the-art knowledge delivered by Software Engineering faculty, to provide students with core foundations that link to modern software engineering practice, and
4. Connects students to world-renown experts in software engineering throughout their four years of study.

Approximately 40 North American universities offer a B.S. Degree in Software Engineering; 23 of these programs are accredited as of Fall 2015. No Big Ten universities offer an undergraduate degree program in Software Engineering (see Table C). Within the member states of the Midwestern Higher Education Compact, five ABET accredited Software Engineering programs are currently offered: (1) Iowa State University, Ames, IA, (2) Milwaukee School of Engineering, Milwaukee, WI, (3) Rose-Hulman Institute of Technology, Terre Haute,

IN, (4) University of Michigan – Dearborn, Dearborn, MI, and (5) University of Wisconsin – Platteville, Platteville, WI.

Of these five institutions, Iowa State University (ISU) is the only other university with a strong research program in Software Engineering. Our program differs from the program at ISU in two important ways: 1) the ISU program largely follows a Computer Science curriculum with the addition of software engineering courses, whereas our Software Engineering curriculum was designed to teach foundational topics traditionally taught in first year Computer Science courses, e.g., CS 1 and CS2, with a software engineering focus, and 2) our Software Engineering program requires a two-year capstone, whereas students in the ISU Software Engineering program are required to take a one-year capstone.

#### E. Consistency with the Comprehensive Statewide Plan for Postsecondary Education

The proposed major meets the goals outlined in the Comprehensive Statewide Plan for Postsecondary Education by the Nebraska Coordinating Commission for Postsecondary Education (CCPE). CCPE wants to ensure that postsecondary education develops graduates who can both contribute to and succeed in a high technological world. The proposed Software Engineering major strengthens that goal in several ways:

1. Meeting the needs of students by increasing participation and access of students to education and training in software engineering by recruiting students across the State and across the nation regardless of economic status, age, culture, disability, color, national origin, or gender.
2. Meeting the needs of students by providing graduates of the proposed program with the skills, knowledge, and critical thinking skills necessary to succeed in the field of software engineering, and to be responsible citizens and leaders in their field through the ethical, competent and creative practice of software engineering in industry, academia and the public sector.
3. Meeting the needs of the State of Nebraska by providing workforce development and ongoing training in the field of software engineering in order to provide employers and industries in both urban and rural areas of the State with knowledgeable, trained and skilled software engineers.
4. Contributing to the health and prosperity of the people of Nebraska and the vitality of the State through research and development efforts, technology transfer and technical assistance by preparing graduates of the program to become technology leaders who create new products and services and who help facilitate the technology achievements of others.
5. Adopting new teaching methods and technologies to address the evolving needs of students who have grown up with technology and are seeking an innovative and experience-based curriculum to study a rapidly evolving engineering discipline.
6. Meeting accountability, effectiveness, and partnership goals by developing and sustaining exemplary teaching, learning, research and public service activities through faculty coordination with peers and with organizations that rely on technology to meet their objectives.



- [1] Software Engineering 2014 Curriculum Guidelines for Undergraduate Degree Programs in Software Engineering, The Joint Task Force on Computing Curricula, IEEE Computer Society, and Association for Computing Machinery, SE2014 Revision, 23 February 2015.
- [2] <http://www.bls.gov/ooh/Computer-and-Information-Technology/Software-developers.htm>
- [3] [http://www.bls.gov/oes/current/oes\\_30700.htm](http://www.bls.gov/oes/current/oes_30700.htm)
- [4] Guide to the Software Engineering Body of Knowledge (SWEBOK) V3.0, Bourque, P. and Fairley, R., editors, IEEE Computer Society, 2004.
- [5] [http://www.payscale.com/research/US/Job=Software\\_Engineer/Salary/4fd947de/Entry-Level](http://www.payscale.com/research/US/Job=Software_Engineer/Salary/4fd947de/Entry-Level)

## **ADDENDUM A: Relationship of the Proposal to the NU Strategic Framework**

The proposed major in Software Engineering matches the spirit of the following passages from the University's 2014-2016 Strategic Planning Framework:

1. The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate and professional education.
  - a. The university will strive to increase affordability and ensure qualified students are not denied access based on economic circumstances.
  - b. Increase the percentage of Nebraska high school graduates (the state "college-going rate") who enroll at and graduate from the university.
  - c. Increase the diversity of those who enroll at and graduate from the university, employing measures permitted by state and federal law.
  - e. Promote adequate student preparation for success in higher education.
  - f. Promote ease of transfer to the university from other higher education institutions.
2. The University of Nebraska will build and sustain undergraduate, graduate and professional programs of high quality with an emphasis on excellent teaching.
  - a. Recruit and retain exceptional faculty and staff, with special emphasis on building and sustaining diversity.
  - c. Provide opportunities for global engagement of faculty through international teaching, research and outreach exchanges, fellowships and collaborations.
3. The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector and other educational institutions.
  - a. Work to stem and reverse the out-migration of graduates and knowledge workers.
  - b. Increase proportion of the most talented Nebraska high school students who attend the University of Nebraska.
  - c. To attract talent to the state, increase the number of nonresident students who enroll at the university.
  - d. To adequately prepare students for the global economy, significantly increase opportunities for international study and engagement.
  - f. Develop and strengthen internship and service learning opportunities with business, education, government, military, and nonprofit organizations.
  - g. Engage in partnerships with government and the private sector to develop regional economic strength.
  - h. Pursue excellence in educational attainment aligned with the long-term interests of the State.
4. The University of Nebraska will pursue excellence and regional, national and international competitiveness in research and scholarly activity, as well as their application, focusing on areas of strategic importance and opportunity.
  - a. Increase external support for research and scholarly activity.
  - b. Increase undergraduate and graduate student participation in research and its application.

5. The University of Nebraska will serve the entire state through strategic and effective engagement and coordination with citizens, businesses, agriculture, other educational institutions, and rural and urban communities and regions.
  - a. Support economic growth, health and quality of life through policy initiatives consistent with university mission.
  - b. Recognize and reward faculty innovation and effectiveness in outreach and engagement.
  - c. Support Nebraska's economic development.
  - d. Support entrepreneurship education, training and outreach.
  - e. Collaborate with the public and private sectors to build successful regional, multi-state, international linkages.

## ADDENDUM B: Description of Software Engineering Major

### 1. Student Learning Outcomes

The Joint Task Force on Computing Curricula has identified a number of expected student outcomes for an undergraduate curriculum in Software Engineering.<sup>2</sup> These complement the general ABET accreditation outcome requirements applicable to all engineering programs and the accreditation requirements specific to Software Engineering programs.

According to Software Engineering curricular guidelines, graduates of an undergraduate Software Engineering program should be able to demonstrate the following qualities:

- **Professional Knowledge:** Show mastery of software engineering knowledge and skills and of the professional standards necessary to begin practice as a software engineer.
- **Technical Knowledge:** Demonstrate an understanding of and apply appropriate theories, models, and techniques that provide a basis for problem identification and analysis, software design, development, implementation, verification, and documentation.
- **Teamwork:** Work both individually and as part of a team to develop and deliver quality software artifacts.
- **End-User Awareness:** Demonstrate an understanding and appreciation of the importance of negotiation, effective work habits, leadership, and good communication with stakeholders in a typical software development environment.
- **Design Solutions in Context:** Design appropriate solutions in one or more application domains using software engineering approaches that integrate ethical, social, legal and economic concerns.
- **Perform Trade-Offs:** Reconcile conflicting project objectives, finding acceptable compromises within the limitations of cost, time, knowledge, existing systems, and organizations.
- **Continuing Professional Development:** Learn new models, techniques, and technologies as they emerge and appreciate the necessity of such continuing professional development.

We adopt these outcomes as central to our proposed Software Engineering major. Outcome assessments will include regular and ongoing course and curriculum assessment, based on student course evaluations, published benchmark standards, examination results, feedback from industrial employers, and faculty review of the curriculum. Both the feedback from these sources and the revisions implemented as a result of the feedback will be documented.

### 2. Admission Criteria and Selection Procedures

Admission criteria and selection procedures will:

- Seek students who demonstrate analytical capabilities.
- Emphasize equity by assuring no constraints due to economic status, age, culture, disability, color, national origins, or gender.
- Seek to link student applicants to financial support enabling them to obtain their degree.

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<sup>2</sup> The Joint Task Force on Computing Curricula, IEEE Computer Society, and Association for Computing Machinery, Software Engineering 2014 Curriculum Guidelines for Undergraduate Degree Programs in Software Engineering, SE2014 Revision, 23 February 2015.

The admission requirements for the proposed major in Software Engineering are the same as the admission requirements for the College of Engineering at the University of Nebraska-Lincoln. Once students are admitted to the College, students must go through the Professional Admission Process, which is automatically performed for qualifying students at the end of the sophomore year. In order to be considered for Professional Admission to the Software Engineering program, students must receive at least a C+ in SOFT 160, SOFT 161, SOFT 260, SOFT 261, CSCE 235, MATH 106 and MATH 107 (or their equivalents), and have a GPA of at least 2.5 (semester and cumulative).

### 3. Coursework Requirements

The coursework for the major in Software Engineering (Bachelor of Science in Software Engineering) consists of 124 credit hours. Seventy-nine hours cover core Computer Science and Software Engineering courses: 52 hours of required coursework (shown below), 15 hours of technical electives, and 12 hours of a two-year capstone course. As an information-based engineering discipline, the proposed software engineering major also requires students to complete 18 hours of coursework in mathematics and 12 hours of science course work, of which at least once science course must include a laboratory. In contrast to physics-based engineering disciplines, the training of Software Engineers calls for a background in mathematics that helps to organize and process representations that characterize potentially large corpuses of data. For this reason, student mastery of techniques from discrete mathematics, linear algebra, probability and statistics is essential. To accommodate courses on these topics, the proposed curriculum eliminates requirements for upper level calculus and differential equations - though they can still be taken as electives. Software Engineering majors take an additional 15 hours of coursework to satisfy Achievement-Centered Education institutional objectives, and are required to take a 1 credit hour internship.

Course Number	Title	Credits	Development
SOFT 160	Software Engineering I	4	New course
SOFT 161	Software Engineering II	4	New course
SOFT 260	Software Engineering III	4	New course
SOFT 261	Software Engineering IV	4	New course
SOFT 360	Software Engineering Mentoring and Leadership	1	New course
SOFT 461	Advanced Topics in Software Engineering	3	Existing course*
SOFT 466	Software Design and Architecture	3	New course
SOFT 467	Testing, Verification and Analysis	3	New course
SOFT 468	Requirements Elicitation, Modeling and Analysis	3	New course
CSCE 10	Introduction to CSE	0	Existing course
CSCE 230	Computer Organization	4	Existing course
CSCE 235	Introduction to Discrete Structure	3	Existing course
CSCE 322	Programming Language Concepts	3	Existing course
CSCE 378	Human-Computer Interaction	3	Existing course
CSCE 411	Data Modeling for Systems Development	3	Existing course
CSCE 423	Design and Analysis of Algorithms	3	Existing course
CSCE 451	Operating Systems Principles	3	Existing course
CSCE 491	Internship in Computing Practice	1	Existing course

\*SOFT 461 will be cross-listed with existing course CSCE 461 to avoid naming conflicts with the new Software Engineering course, SOFT 161.

A sample program of study for the Software Engineering major is shown below.

First Semester	Credits
SOFT 160: Software Engineering I	4
CSCE 10: Introduction to CSE	0
MATH 106: Calculus I	5
Natural Sciences course	4
ACE Student Learning Outcome 5 course	3
<b>Total</b>	<b>16</b>

Second Semester	Credits
SOFT 161: Software Engineering II	4
CSCE 235: Discrete Structures	3
MATH 107: Calculus II	4
Natural Sciences course with Lab	4
<b>Total</b>	<b>15</b>

Third Semester	Credits
SOFT 260: Software Engineering III	4
CSCE 378: Human-Computer Interaction	3
ENGR 20: Sophomore Engineering Seminar	0
Natural Sciences course	4
CSCE 230: Computer Organization	4
<b>Total</b>	<b>15</b>

Fourth Semester	Credits
SOFT 261: Software Engineering IV	4
CSCE 322: Programming Language Concepts	3
CSCE 451: Operating Systems Principles	3
MATH 314: Linear Algebra	3
STAT 380: Statistics and Applications	3
<b>Total</b>	<b>16</b>

Fifth Semester	Credits
CSCE 493: Innovation Lab Project	3
CSCE 411: Data Modeling for Systems Development	3
CSCE 423: Design and Analysis of Algorithms	3
Math/Statistic Elective course	3
JGEN 200: Technical Communication I	3
SOFT 360: Software Engineering Mentoring and Leadership	1
<b>Total</b>	<b>16</b>

Sixth Semester	Credits
CSCE 493: Innovation Lab Project	3
SOFT 461: Advanced Topics in Software Engineering	3
SOFT 466: Software Design and Architecture	3
CSCE/SOFT Technical Elective course	3
CSCE/SOFT Technical Elective course	3
CSCE 491: Internship in Computing Practice	1
<b>Total</b>	<b>16</b>

Seventh Semester	Credits
CSCE 486: Computer Science Professional Development	3
SOFT 467: Testing, Verification and Analysis	3
ACE Student Learning Outcome 6 course	3
CSCE/SOFT Technical Elective course	3
CSCE/SOFT Technical Elective course	3
<b>Total</b>	<b>15</b>

Eighth Semester	Credits
CSCE 487: Computer Science Senior Design Project	3
SOFT 468: Requirements Elicitation, Modeling and Analysis	3
ACE Student Learning Outcome 7 course	3
ACE Student Learning Outcome 9 course	3
CSCE/SOFT Technical Elective course	3
<b>Total</b>	<b>15</b>

To accommodate transfer students from related majors at UNL and other institutions, we will leverage our current advising infrastructure to assess the student's pre-requisite knowledge and determine the proper entry point into the Software Engineering curriculum. A bridge course will be offered to instruct students on the core software engineering topics covered in the first two software engineering courses (SOFT 160 and SOFT 161), thus enabling students to more readily transition between majors during the summer after their Freshman year or prior to their transfer from another college or university.

#### 4. Advising

Advisors are assigned to prospective students through the Engineering Student Services in the College of Engineering. Once admitted into the program, faculty advisors from the major are assigned to help guide students through their degree program and to mentor them for consideration for internship and employment opportunities.

#### 5. Accreditation

The Engineering Accreditation Commission (ABET) accredits undergraduate programs in Software Engineering. We plan to accredit the proposed program. The year for the first visit is to be determined.

## **APPENDIX A: Letters of Support**

Enclosed Letters of Support from Nebraska Companies:

- Pen-Link, P. Kevin Pope, President & CEO; Eric D. Hunzeker, VP, Product Management
- Kiewit Corp., Kris Lappala, Chief Information Officer

Additional Letters of Support from Nebraska Companies (available upon request):

- Nebraska Global, Doug Durham, Principal & CTO
- Fiserv, Jamie Deterding, Senior Vice President
- Hudl, Jon Dokulil, VP of Engineering, Hudl
- Sandhills Publishing, Scott McKinney, Chief Information Officer
- Nelnet, Inc., Mike Dunlap, Chairman; Chuck Norris, Director
- Centrix Solutions, Inc., Tim Schnell, President
- Professional Research Consultants, Inc., José M. “Joe” Inguanzo, Owner, President and CEO
- Zillow Group, Inc., Jason Steele, Group Manager

Letters of Support from University of Nebraska-Lincoln

- Dr. Tim Wei, Dean of the College of Engineering
- Dr. Joe Francisco, Dean of the College of Arts & Sciences
- Dr. David Keck, Raikes School of Computer Science and Management





July 20<sup>th</sup>, 2015

Dr. Matthew B. Dwyer  
Leonard A. Lovell Professor of Software Engineering  
Chair, Department of Computer Science and Engineering  
256 Avery Hall  
University of Nebraska  
Lincoln, NE 68588-0115

Dr. Dwyer:

We are writing this letter in support of the new UNL Bachelors of Science in Software Engineering program. We feel strongly that several elements of the proposed program help address key challenges that directly impact not only our business, but all other software and information technology businesses in Lincoln and throughout Nebraska.

First, there is a shortage of skilled software engineers. By offering this new and relatively unique undergraduate degree program, UNL is likely to draw more students from around the Midwest and beyond, increasing the overall pool of potential resources. By providing local businesses more opportunities for touchpoints with students throughout their educations in the form of guest lectures, presentations, real world process audits, and internships, we'll likely keep a larger share of that already larger pool of graduating software engineers in Nebraska.

Second, the software engineers we do hire directly out of college are often ill-prepared to be immediately productive. While the traditional computer science curriculum does provide solid software development skills and understanding of theory, there tends to be a lack of understanding and appreciation of software as complex systems, design and architectural patterns, and applied software development and project management processes. A review of the proposed curriculum and our understanding of the opportunities for local software and IT business leaders to participate in the teaching process gives us confidence that this program will be turning out graduates better prepared to hit the ground running.

Finally, computer science and engineering graduates often aren't aware of the amazing career opportunities in software engineering that exist right here in Lincoln and Nebraska. While local companies have the same opportunity to engage and educate undergraduates afforded to the large



national players, we don't generally enjoy the same top-of-mind branding or notoriety. By providing local software and IT business leaders more and more timely interactions with these students, we are likely to convince many that pursuing software engineering careers right here can be every bit as exciting and even more rewarding, especially when considering cost of living and other quality of life metrics.

In closing, we are excited and encouraged by this new proposed undergraduate program. When the time comes for us to be further involved, do not hesitate to contact us.

Best Regards,

*P. Kevin Pope*

P. Kevin Pope,  
President & CEO

*Eric D. Hunzeker*

Eric D. Hunzeker,  
Vice President, Product Management

**DATE:** July 19, 2015

**TO:** Mathew Dywer

**FROM:** Kris Lappala - Chief Information Officer – Kiewit Corp.

**COPY:** Jake Macholtz – Vice President of Technology

**SUBJECT:** University of Nebraska Lincoln - Proposed Software Engineering Program

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I am writing this letter to offer strong support for the proposed bachelors of science in software engineering program at the University of Nebraska-Lincoln. As a Fortune 300 company in Nebraska, Kiewit is similar to the many other large, successful organizations in Omaha and Lincoln that require highly skilled technologists, including effective software developers, to help our businesses run successfully.

This four-year software engineering program would be a significant help to meet the growing demand we face in filling key roles across our organization. We are regularly looking for quality candidates, especially with the unemployment rate for technologists in the region at less than 1%. This challenge is exacerbated by the need for developers to have more than technical skills. They now also need strong communication skills – to convey ideas, listen and relate to others in a team environment.

It takes a comprehensive training program to develop the technology and collaboration skills that our business demands – one that can be offered through strong university programs. The size and complexity of designing and developing software systems can't be taught at a week-long development seminars or training sessions. Developing software solutions in our businesses requires an education that covers the complete development process beyond just coding, such as requirements gathering, systems integration, testing, deployment and day two support.

The lack of qualified technologists in the state has not gone unnoticed. Kiewit and other Fortune 500 companies in Omaha are working closely with the Chamber of Commerce to recruit outside the state to bring top talent to our companies. A program at the University of Nebraska-Lincoln would only help alleviate our challenges and cultivate excellent talent that we can develop at our strong companies in our state.

Kiewit is committed to being a good partner for this proposed university program to help ensure its long-term success. This includes providing input on program curriculum, generating content and materials, and offering internships to ensure we're building the technologists of the future.

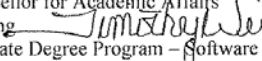
Thank you for your strong consideration for this proposal. We have the opportunity to establish a dynamic program that will not only draw top students to the University of Nebraska-Lincoln, but also feed a crucial pipeline to local companies committed to growing our economy and developing generations of outstanding technology talent in Nebraska. I look forward to working with you and advancing this important effort.

Sincerely,



Kris Lappala  
Chief Information Officer

September 18, 2015

To: Ronald Green, Interim Senior Vice Chancellor for Academic Affairs  
From: Timothy Wei, Dean College of Engineering   
Subject: Support For Creation of New Undergraduate Degree Program – Software Engineering

The College of Engineering supports and is in favor of establishing a BS in Software Engineering degree. The degree will be administered by the Department of Computer Science and Engineering. The degree is consistent with the mission and purpose of COE and will contribute to the overall objectives of the college.

IEEE defines software engineering as "the application of a systematic, disciplined, quantifiable approach to the development, operation and maintenance of software; that is, the application of engineering to software." Its importance as a field of study and practice has increased significantly since its inception in 1969 as software systems have grown in size and complexity, and as society's reliance on software has grown.

Formally, Software Engineering emerged as a distinct discipline in 2004 when the IEEE and ACM established a body of knowledge for the field that is distinct from Computer Engineering and Computer Science. At that time ABET began accrediting degree programs in Software Engineering and today, 22 such programs exist across the country. The trend for degree programs in Software Engineering is on the upswing with several research-intensive universities working to add them, e.g., UC Irvine, Arizona State. UNL would be the first Big Ten university to establish such a program.

As a field of study, Software Engineering fits within the College of Engineering because of its focus on rigorous fundamentals, broad training of engineers who can communicate and connect with other disciplines, and in-depth practical training.

The US Bureau of Labor and Statistics projects very strong growth in employment nationwide in software engineering with especially strong growth in Nebraska. Their recent survey of businesses estimates a need for at least 160 new software engineers for each of the next 7 years. These are attractive and well-paying jobs, with starting salaries of more than \$70,000, and there is latent demand for a program here in Nebraska. Evidence for that demand can be seen by the fact that Iowa State University's Software Engineering program recruits more than 20 students per year from the Omaha area.

Local industry support for this program is strong; more than 18 local companies have stepped forward to help create an innovative program that will help address the acute shortage of software engineers. These companies are working to create a local technology council that will provide opportunities for students to connect with working professionals both in the classroom, through internships, and more broadly through mentoring. This has great potential to create high-levels of student retention and good student job placement.

The strong UNL Software Engineering research program, recently ranked in the top-5 world-wide, will enable UNL to create an innovative program, combining the latest best practices in research-based instructional methods with hands-on experience through real-world projects and internships. Leveraging state-of-the-art equipment and facilities, the new SE program will deliver the foundations and skills necessary to produce a highly-trained workforce for Nebraska's burgeoning technology sector. I expect the program to grow quickly and to establish itself as a national model that draws hundreds of students from the region to Lincoln.

September 21, 2015

Dear Colleagues:

I write in support of the Software Engineering major as developed by the Department of Computer Science and Engineering, a shared academic unit between the College of Arts & Sciences and the College of Engineering. While this particular major would reside in the College of Engineering only, the shared unit (CSE) follows the curriculum processes of both colleges. CSE personnel have consulted with and kept the Arts & Sciences Dean's Office and the Arts & Sciences Academic and Career Advising Center informed of the plans for the major. We have worked together to ensure that all of the programs of study currently offered by CSE will continue to run smoothly for students as CSE brings this new major online.

I appreciate this opportunity to support the work of the CSE faculty.

Sincerely,



Joseph S. Francisco  
Dean  
Elmer H. and Ruby M. Cordes Chair in Chemistry  
University of Nebraska-Lincoln  
College of Arts & Sciences

August 2, 2015

Re: Letter of Support for Software Engineering Major

Dear Professor Dwyer,

On behalf of the Jeffrey S. Raikes School faculty, I wish to express my enthusiastic support for Computer Science and Engineering's initiative to introduce a software engineering major. We believe that a software engineering major will further strengthen our School's educational offering and enhance our attractiveness to top students across the nation. We expect that within a few years, the majority of our students will, in fact, be software engineering majors. We have already begun the process of enhancing our curriculum so that the Raikes School remains a strong and supportive partner to Computer Science and Engineering.

For more than a decade, the Raikes School, along with its academic partners in business and computer science, has provided a curriculum that has emphasized applied computing and software development, as well as management insight, leadership, and team skills. We believe that the proposed software engineering major will reflect much of what has been learned and what has led to the renowned success of our graduates. This new major will make the learning experience much more widely available at UNL and position UNL strongly to meet the rapidly expanding nationwide demand for skilled software professionals.

This software engineering major initiative is coincident with the rapid expansion of our Design Studio software engineering capstone course for junior and seniors. Our leadership role in the NSF *Pathways to Innovation* program has resulted in emerging collaborations with the College of Engineering and the College of Business and focused on innovation, entrepreneurship, and interdisciplinarity. We believe that an influx of new software engineering students will greatly enhance this related initiative as well and believe that the outcomes will be quite exciting for UNL.

We are quite enthusiastic about being a key partner to this important initiative. I have no doubt that the resulting programs, student outcomes, and interdisciplinary collaborations will result in an even stronger UNL!

Sincerely,



David Keck  
Director

## APPENDIX B: Credit Hour Justification

The University of Nebraska Board of Regents Policy on the Baccalaureate Degree (RP-5.1.4) states the following:

### 1. Purpose

The University of Nebraska adopts the following policy to ensure that students have the opportunity to graduate in four years, if they take 15 hours in each of eight semesters.

### 2. Policy

The University of Nebraska baccalaureate degree shall require 120 credit hours.

### 3. Exceptions to the Policy

- a. Exceptions to the 120 hour baccalaureate degree shall be approved by the Provost and reported to the Board of Regents if any of the following criteria are documented.
  - 1) Professional accreditation requires more credits for licensing than can be completed to meet standard graduation requirements.
  - 2) A degree is governed by State requirements for certification that require more than 120 hours to meet standard graduation requirements.
  - 3) The degree is defined as a five-year degree.
- b. Any other exception to the 120 credit hours baccalaureate degree must be approved by the Board of Regents of the University.

### 4. Procedure

This policy will be required for students first entering the University in the fall of 2012. Students previously enrolled may be eligible for the 120 hour degree option.

Reference: BRUN, Minutes, 70, p. 34, (September 9, 2011)

### Rationale for 124 Credit Hour Software Engineering Baccalaureate Degree

The rationale for this request is three-fold:

- 1) The Accreditation Board for Engineering and Technology (ABET) criteria implicitly result in curricular requirements in excess of 120 credits.
- 2) We have benchmarked our graduation requirements and found that they are consistent with existing 23 ABET accredited Software Engineering programs.
- 3) Over the past few decades, degree requirements for engineering programs have decreased, from a time when an engineering degree was ~150 credit hours over five years to the present day average of ~128 credits.

Details regarding these three points are outlined below.

### ABET Criteria

The Software Engineering program is subject to the accreditation criteria prescribed by the Engineering Accreditation Commission of ABET, Inc. These criteria specify minimum credit hour equivalents for math, science, and engineering topics. Further, ABET articulates 11 student outcomes that must be attained by graduates at the time of graduation. This burden, combined with the University of Nebraska-Lincoln (UNL) ACE requirements, requires the Software Engineering program at UNL to establish course requirements satisfying general education and accreditation requirements in excess of 120 credit hours.

### Existing ABET Accredited Software Engineering Programs

The proposed Software Engineering program credit hour requirement (124) is consistent with the credit hour requirements of the 23 existing ABET accredited Software Engineering programs offered in the U.S. We note that some of the programs listed below are based on quarter credit hours/units. Four of the 23 existing programs have 120 credit hour requirements, both of which require only a one-semester capstone course (versus the four semester capstone experience described in the proposed program).

<i>School Name</i>	<i>Location</i>	<i>Credit Hours</i>	<i>Notes</i>
Auburn University	Auburn, AL	120	Include only a one-semester capstone experience
California Polytechnic State Univ., San Luis Obispo	San Luis Obispo, CA	187-188	Quarter Units
Clarkson University	Potsdam, NY	120	Requires only a one semester capstone experience
Drexel University	Philadelphia, PA	188	Quarter Credit Hours – one year capstone
Embry-Riddle Aeronautical Univ. – Daytona Beach	Daytona Beach, FL	127	
Fairfield University	Fairfield, CT	132	
Florida Institute of Technology	Melbourne, FL	127	
Gannon University	Erie, PA	134	
Iowa State University*	Ames, IA	128	
Kennesaw State University	Kennesaw, GA	125	
Milwaukee School of Engineering*	Milwaukee, WI	192	Quarter Credit Hours
Mississippi State University	Mississippi State, MS	128	
Monmouth University	West Long Branch, NJ	128	
Montana Tech of the University of Montana	Butte, MT	128	
Oregon Institute of Technology	Klamath Falls, OR	187	Quarter Credit Hours
Pennsylvania State University, The Behrend College	Erie, PA	127	



<i>School Name</i>	<i>Location</i>	<i>Credit Hours</i>	<i>Notes</i>
Rochester Institute of Technology	Rochester, NY	128	
Rose-Hulman Institute of Technology*	Terre Haute, IN	192	Quarter Credit Hours
The University of Virginia's College at Wise	Wise, VA	120	Requires only a one year capstone experience
Univ. of Michigan – Dearborn*	Dearborn, MI	120	Requires only a one year capstone experience
Univ. of Texas at Arlington	Arlington, TX	121+	Additional credits required for “modern and classical languages as required”
Univ. of Texas at Dallas	Dallas, TX	123	
Univ. of Wisconsin-Platteville*	Platteville, WI	127-130	Varies based on course selection

\* Denotes programs offered by member states in the Midwestern Higher Education Compact.

### *Engineering Degree Requirements at UNL*

UNL College of Engineering programs have demonstrated an effort to reduce the number of credit hours required for degrees. In the 1950's and 1960's, UNL engineering degrees required up to 150 hours for a BS degree. Since then, the various programs have decreased the number of credit hours required for graduation. The number of credit hours required for the proposed Software Engineering degree is consistent with the credit hour requirements for other Engineering degrees at UNL.

<b>UNL College of Engineering Major</b>	<b>Current Credit Hour Requirements</b>
Agricultural Engineering	131
Architectural Engineering	129
Biological Systems Engineering	134
Chemical Engineering	135
Civil Engineering	130
Computer Engineering (Lincoln)	126
Computer Engineering (Omaha)	133
Construction Engineering	127
Electrical Engineering	126
Electronics Engineering	133
Mechanical Engineering	129
(Proposed) Software Engineering	124

## **APPENDIX C: Faculty Curriculum Vitae**

- Matthew B. Dwyer, Lovell Professor and Chair, Computer Science and Engineering
- Gregg Rothermel, Professor and Jensen Chair of Software Engineering, Computer Science and Engineering
- Sebastian Elbaum, Bessey Professor, Computer Science and Engineering
- Myra B. Cohen, Susan J. Rosowski Associate Professor, Computer Science and Engineering
- Witawas Srisa-an, Associate Professor, Computer Science and Engineering
- Suzette Person, Associate Professor of Practice and Director of Software Engineering, Computer Science and Engineering

**Dr. Matthew B. Dwyer** is the Lovell Professor and Chair in Computer Science and Engineering at UNL. His research interests are in formal modeling and analysis of software systems. In his career, Dr. Dwyer has published 25 journal and 93 conference papers, all full-length highly-refereed manuscripts. His research has been recognized with some of the highest distinctions in the field, for example, his work has been awarded an NSF CAREER award, the ICSE "Most Influential Paper" in 2010, the SIGSOFT "Impact Paper" award in 2010, and the ACM Distinguished Paper award in 2006 and 2013. He has chaired the top research conferences in the field of Software Engineering, FSE in 2004, ICSE in 2008, and OOPSLA in 2012, and is the editor-in-chief of the top journal in the field, IEEE Transactions on Software Engineering. He has been named an ACM Distinguished Scientist (2007), a Fulbright Research Scholar (2011), and an IEEE Fellow (2013). A 2004 ranking of international scholars in the field of Software Engineering placed him 28th in the world and another ranking in 2009 placed him 9th. He has graduated 9 PhD students, 4 of whom have taken faculty positions, and his classroom teaching has garnered teaching awards in 2010 and 2014. His full curriculum vitae is available at <http://cse.unl.edu/~dwyer/cv.pdf>

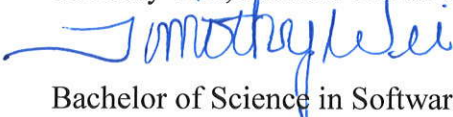
**Dr. Gregg Rothermel** is the Jensen Chair of Software Engineering and Professor in Computer Science and Engineering at UNL. His research interests are in software maintenance, software testing, end-user software engineering and empirical studies. In his career, Dr. Rothermel has published 50 journal and 98 conference papers, all full-length highly-refereed manuscripts. Dr. Rothermel has chaired the top meetings in software maintenance and testing, ICSM in 2001, ISSTA in 2004, and ICSE in 2007, and is widely known for his influential and pioneering contributions to the field. His research has been recognized with an NSF CAREER award and his h-index, a measure of how widely an author's work is cited, is 64 which ranks him in the top-5 of Software Engineers and in the top-100 of Computer Scientists in the history of those fields. He has been named an ACM Distinguished Scientist (2013) and a 2004 ranking of international scholars in the field of Software Engineering placed him tied for 1st in the world. He has graduated 8 PhD students, 3 of whom have taken faculty positions, and his classroom teaching has garnered teaching awards in 2005 and 2012. His full curriculum vitae is available at <http://cse.unl.edu/~grother/vita.pdf>

**Dr. Sebastian Elbaum** is a Bessey Professor in Computer Science and Engineering at UNL. His research interests are in system dependability through testing, monitoring, and analysis. Dr. Elbaum has 25 journal publications and over 57 rigorously-reviewed conference publications. He is the recipient of numerous awards, including an NSF CAREER award, IBM Innovation Award, Google Faculty Research Award, and four ACM SigSoft Distinguished paper awards (2006, 2008, 2012, 2013). He has also received many teaching awards, including the Dean's Award for Excellence in Graduate Education from UNL Graduate Studies in 2009. He is internationally recognized in the field of software engineering, serving on various steering committees and organizing committees. He recently served as Program Co-Chair of ICSE in 2015. He is Co-Editor for the Information and Software Technology Journal and he is a member of the ACM Transactions on Software Engineering and Methodologies Journal editorial board. He recently co-founded the Nebraska Intelligent Mobile Unmanned Systems (NIMBUS) lab at UNL, where the latest research in software and systems engineering is applied to robotics and sensor networks to develop more capable and dependable UAVs. Dr. Elbaum has graduated 3 PhD students and 25 M.S. students. His full curriculum vitae is available at <http://cse.unl.edu/~elbaum/content/wp-content/uploads/bioelbaumJuly2014.pdf>

**Dr. Myra B. Cohen** is a Susan J. Rosowski Associate Professor in Computer Science and Engineering at UNL. Her research interests are in testing of highly-configurable software, testing software product lines and search based software engineering. Dr. Cohen has 11 journal publications and 54 conference and workshop publications. She holds a distinct position at UNL, by becoming the first junior faculty member to receive both the prestigious National Science Foundation CAREER Award, and the Air Force Office of Scientific Research Young Investigators Research Program Award. She was also selected as one of 12 junior faculty from across the US to serve on the DARPA funded Computer Science Study Group in 2009. She regularly publishes in top tier software engineering venues such as ICSE, FSE, ASE and ISSTA, and received an ACM-SIGSOFT Distinguished paper award at FSE in 2015. She also received an ICSE Best Software Engineering in Practice paper award in 2014. Dr. Cohen is an active member of the software engineering research community, having served on numerous program committees, and conference organizing and steering committees. She was the program co-chair of ISSRE in 2012, and served as the general chair of the IEEE/ACM 2015 Automated Software Engineering Conference (ASE). Dr. Cohen has graduated 2 PhD students and 13 M.S. students since her arrival at UNL in 2004. She regularly includes undergraduates in her research and has publications with several of them. Her full curriculum vitae is available at <http://cse.unl.edu/~myra/CohenCV.pdf>

**Dr. Witawas Srisa-an** is an Associate Professor in Computer Science and Engineering at UNL. His research interests are in embedded systems, programming languages, and operating systems. In his career, Dr. Srisa-an has published 12 journal and 35 conference papers, all full-length highly-refereed manuscripts. His research program has been funded by competitive grants from NSF, AFOSR, NSA, and DARPA. Dr. Srisa-an has served on the program committee for several top scientific meetings in the field of programming languages, ISMM in 2012, OOPSLA in 2012, and ECOOP in 2016. He has graduated 3 PhD students, 1 of whom has taken faculty positions, and his classroom teaching has garnered teaching awards in 2003, 2004, 2005, 2006, and 2008. His full curriculum vitae is available at <http://cse.unl.edu/~witty/CV/witty CV.pdf>

**Dr. Suzette Person** is an Associate Professor of Practice in Computer Science and Engineering, and Director of Software Engineering at UNL. Dr. Person has over 15 years of industry experience as a software engineer. She most recently worked as a Research Computer Scientist at NASA Langley Research Center where her research focused on software testing techniques, and techniques for analyzing the impact of software changes. Dr. Person has two NASA Invention Disclosures, 2 journal publications, and 18 rigorously-reviewed conference publications related to her research, many of which are published in top-tier venues. She received an ACM-SIGSOFT Distinguished paper award in 2006. Dr. Person was a member of the Reinvent Computer Science Curriculum project at UNL in 2003-2004, and co-authored 4 papers related to innovations in computer science curriculum. She is also one of the authors of Bug Hunt, an on-line teaching activity to assist Learning of Software Testing in CS 1 and CS 2. Her full curriculum vitae is available at <http://cse.unl.edu/~sperson/PersonCV.pdf>

Date: January 19, 2016  
To: Susan Fritz, Executive Vice President & Provost  
From: Timothy Wei, Richard L. McNeel Professor and Dean  
  
RE: Bachelor of Science in Software Engineering

On behalf of the College of Engineering (CoE), I am writing to request that the proposed Bachelor of Science in Software Engineering (SE) program be exempt from the 120 credit hour limit.

As with the other undergraduate programs in the College, CoE plans to seek accreditation for the new program through the Engineering Accreditation Commission (EAC) of ABET. The ABET criteria specify minimum credit hour requirements for math, science, and engineering topics. Further ABET articulates 11 student outcomes that must be attained by students at the time of graduation. This burden, combined with the University of Nebraska-Lincoln Achievement Centered Education (ACE) requirements, requires the proposed Software Engineering program to establish course requirements satisfying general education and accreditation requirements in excess of 120 credit hours as explained below.

Curriculum requirements for all ABET accredited engineering programs include a) one year of a combination of college level math and basic sciences, some of which include experimental experience, b) one and one-half years of engineering topics, and c) a general education component that complements the technical content. One year is considered to be the lesser of 32 semester hours or one-fourth of the total credits required for graduation. ABET also requires a major design experience. The ABET criteria specific to software engineering require breadth and depth across the range of engineering and computer science topics, including

*“...computing fundamentals, software design and construction, requirements analysis, security, verification and validation; software engineering processes and tools appropriate for the development of complex software systems; and discrete mathematics, probability, and statistics, with applications appropriate to software engineering.”*

To meet the ABET math and science requirements, the proposed software engineering program includes 30 hours of coursework in math and science.

Required Math & Science (ABET requires 1 year)	Credits Hours
• Natural Sciences courses with lab (students choose from list)	12
• Calculus I & II	9
• Linear Algebra	3
• Statistics and Applications	3
• Math/Statistics Elective	<u>3</u>
TOTAL	30

The SE proposed program also includes 45 credit hours of software engineering coursework.

Required Software Engineering (ABET requires 1.5 years)	Credit Hours
• Software Engineering I-IV	16
• Software Engineering Leadership and Management	1
• Human-Computer Interaction	3
• Advanced Topics in Software Engineering	3
• Software Design and Architecture	3
• Testing, Verification and Analysis	3
• Requirements Elicitation, Modeling and Analysis	3
• Innovation Lab Project*	6
• Computer Science Professional Development*	3
• Computer Science Senior Design Project*	3
• Internship in Computing Practice	<u>1</u>
TOTAL	45

\*Also intended to satisfy ABET major design project experience requirement

Thirty-four (34) hours of breadth and depth courses across software engineering and computer science are required in the proposed software engineering program, including 15 hours of upper-level technical elective courses:

Breadth and Depth Coursework	Credit Hours
• Discrete Structures*	3
• Computer Organization	4
• Programming Language Concepts	3
• Operating Systems Principles	3
• Data Modeling for Systems Development	3
• Design and Analysis of Algorithms	3
• Technical Electives (300-400 level courses)	<u>15</u>
TOTAL	34

\*Has historically counted towards math and science required by ABET

The total number of credit hours to achieve the technical component of the program to align with ABET accreditation requirements is 109.

The UNL Achievement Centered Education (ACE) program identifies 10 learning outcomes that all graduates of UNL must attain. These outcomes are composed of: writing, communication, mathematical reasoning, science, humanities, social sciences, arts, ethics, civics, and integrated product development. The proposed SE curriculum covers three of the 10 outcomes as a matter of course, i.e., mathematical reasoning, science, and integrated product development. The remaining seven outcomes would require an additional 21 credit hours, but we have developed approaches to integrate two additional outcomes, e.g., ethics and communication, into courses required for the SE major. This has resulted in the need for students to take only 15 additional credits beyond the SE major-specific courses to achieve the ACE outcomes. The combination of 109 SE major-specific credits and the tailored approach to ACE outcomes, which requires an additional 15 credits, yields the total of 124 credit hours for the proposed SE major. We believe that reducing the number of credit hours to meet the 120 credit hour limit would impact the quality of the program and has the potential to jeopardize future program accreditation or the ability of the program to meet UNL ACE requirements.

Cc: Ronnie Green, Interim Sr Vice Chancellor for Academic Affairs  
David Jackson, Associate Vice President for Academic Affairs  
David Jones, Associate Dean for Undergraduate Programs, College of Engineering

**TABLE 1: PROJECTED EXPENSES - Bachelor of Science in Software Engineering**

	FY 2016 Year 1		FY 2017 Year 2		FY 2018 Year 3		FY 2019 Year 4		FY 2020 Year 5		<b>Total Cost</b>
	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	
<b>Personnel<sup>1</sup></b>											
Faculty <sup>2</sup>	3	\$338,400	3	\$348,552	3	\$359,009	3	\$369,779	3	\$380,872	\$1,796,612
Professional	0		0		0		0		0		\$0
Graduate assistants <sup>3</sup>	2	\$56,668	2	\$58,368	4	\$120,892	4	\$124,876	4	\$129,012	\$489,816
Support staff <sup>4</sup>	1	\$58,500	2	\$164,255	2	\$169,183	2	\$174,258	2	\$179,486	\$745,682
Subtotal	6	\$453,568	7	\$571,175	9	\$649,083	9	\$668,913	9	\$689,370	\$3,032,109
<b>Operating</b>											
General Operating <sup>5</sup>		\$15,000		\$15,000		\$15,000		\$15,000		\$15,000	\$75,000
Equipment											\$0
New or renovated space											\$0
Library/Information Resources											\$0
Other											\$0
Subtotal		\$15,000		\$15,000		\$15,000		\$15,000		\$15,000	\$75,000
<b>Total Expenses</b>		\$468,568		\$586,175		\$664,083		\$683,913		\$704,370	<b>\$3,107,109</b>

<sup>1</sup>Yearly personnel expenses are increased by 3% annually for years 2-5 from the year 1 baseline.

<sup>2</sup>Funds to hire two Assistant Professors (estimated starting salary \$90K-\$95K) and one Assistant Professor of Practice (estimated starting salary \$72K-\$76K), plus benefits. In addition to the new hires, the current SE faculty allocate a portion of their teaching capacity to the new program, e.g., offerings of SE courses in CS and CE will be reduced and that capacity directed to this new SE degree program.

<sup>3</sup> Hire two Graduate Teaching Assistants (GTAs) to support in-class lab-based instruction, an additional two GTAs will be hired as the program builds out.

<sup>4</sup>Hire an entry level computing staff member to exclusively support undergraduates (laptop setup, infrastructure, etc.). In year 2, hire a staff member to support the capstone courses required during Junior and Senior years of program.

<sup>5</sup>Operating budget will be used for recruiting, outreach, industry programs, and day-to-day operations specific to the new Software Engineering program.



**TABLE 2: REVENUE SOURCES FOR PROJECTED EXPENSES - Bachelor of Science in Software Engineering**

	FY2016 Year 1	FY2017 Year 2	FY2018 Year 3	FY2019 Year 4	FY2020 Year 5	Total
Allocated UNL Funds for CSE <sup>1</sup>	\$395,068	\$ 406,920	\$ 419,128	\$ 431,701	\$ 444,653	\$2,097,470
Required New Public Funds						
1. State Funds						
2. Local Tax Funds (community colleges)						
Gross Tuition/Gross Differential Tuition <sup>2</sup>	\$404,131	\$990,884	\$1,600,945	\$2,235,012	\$2,456,358	\$7,687,330
Other Funding						
Total Revenue	\$799,199	\$1,397,804	\$2,020,073	\$2,666,714	\$2,901,010	\$9,784,800

<sup>1</sup>UNL's Senior Vice Chancellor for Academic Affairs has allocated funds for one Asst. Professor of Practice position, two new Asst. Professor hires, and two Teaching Assistants. Yearly personnel expenses are increased by 3% annually for years 2-5 from the year 1 baseline. As program growth requires, additional hires will be supported with college tuition and differential tuition allocations.

<sup>2</sup> Gross tuition estimates are based on the table below.

Projected Tuition Revenue										
Student Type <sup>1</sup>	Year 1		Year 2		Year 3		Year 4		Year 5	
	R	N	R	N	R	N	R	N	R	N
Estimated Gross Tuition <sup>2</sup>	\$8,693.44	\$25,584.69	\$8,867.31	\$26,096.38	\$9,044.65	\$26,618.31	\$9,225.55	\$27,150.68	\$9,410.06	\$27,693.69
Estimated Enrollment <sup>3</sup>	29		69		109		149		160	
Est. Enrollment by Type	20	9	47	22	74	35	101	48	108	52
Estimated Gross Tuition	\$173,868.75	\$230,262.19	\$416,763.39	\$574,120.39	\$669,304.28	\$931,640.81	\$931,780.09	\$1,303,232.40	\$1,016,286.08	\$1,440,071.80
Est. Total Gross Tuition Revenue	\$404,130.94		\$990,883.78		\$1,600,945.09		\$2,235,012.49		\$2,456,357.89	

**Est. 5 Year Gross Tuition Revenue**

**\$7,687,330.18**

<sup>1</sup> R=Resident, N=Non-Resident

<sup>2</sup> Tuition estimates include differential tuition for CSCE and SOFT courses; annual tuition increases of 2% are used for years 2-5.

<sup>3</sup> Expected steady state enrollment, by year 5, is 160 students (40 in each class).

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Establishment of the Center for Patient, Family, and Community Engagement in Chronic Care Management (CCCM) in the College of Nursing at the University of Nebraska Medical Center (UNMC)

RECOMMENDED ACTION: Approval is requested to establish the Center for Patient, Family, and Community Engagement in Chronic Care Management (CCCM) in the College of Nursing at UNMC

PREVIOUS ACTION: January 20, 2006 – The Board of Regents approved amendments to Section 2.11 of the *Bylaws of the Board of Regents of the University of Nebraska* regarding Multi-Departmental Academic Centers for Research, Teaching, and/or Service

EXPLANATION: The goal of the center is to become a world leader in advancing research that can strengthen patient, family, and community engagement in management of chronic conditions. An estimated 133 million United States adults have a chronic disease and nearly 25% of those have two or more chronic diseases. Increasing rates of chronic illness are associated with higher rates of hospitalization and nearly one third of all adults discharged from hospitals are estimated to have four or more chronic illnesses. The center will provide the research infrastructure necessary to facilitate growth in externally funded interdisciplinary and collaborative studies focused on self-management of chronic health conditions.

This proposal has been reviewed by the Council of Academic Officers. This proposal also has been reviewed and recommended for approval by the Academic Affairs Committee.

PROGRAM COST: \$1,394,260 over 5 years (details on proposal page numbers 19 and 20)

SOURCE OF FUNDS: The Center will be supported by an existing fund gift at the University of Nebraska Foundation as well as research revenues from the Vice Chancellor for Research and Nebraska Tobacco Settlement Biomedical Research and Development Fund. College of Nursing funds also will support start-up and cost sharing expenses.

SPONSORS: Jennifer Larsen  
Vice Chancellor for Research

Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center

RECOMMENDED: Susan M. Fritz  
Executive Vice President and Provost

DATE: February 26, 2016

# **Request to Approve the Center for Patient, Family, and Community Engagement in Chronic Care Management**

## **Descriptive Information**

- Name of Center: Center for Patient, Family, and Community Engagement in Chronic Care Management (CCCM)
- Programs involved:
  - University of Nebraska Medical Center Colleges of Nursing, Medicine, Pharmacy, Public Health, Dentistry, Allied Health Professions, and Graduate Studies; Fred & Pamela Buffett Cancer Center; and the Munroe-Meyer Institute for Developmental Disabilities
  - Collaborate and develop new initiatives with Nebraska Medicine, University of Nebraska Omaha, University of Nebraska Lincoln, and University of Nebraska Kearney.
- Other programs offered in this field by UNMC/NU: None.
- Administrative unit for the center: University of Nebraska Medical Center (UNMC) College of Nursing (CON)
- Physical location, if applicable: Space has been assigned on both the Omaha and Lincoln campuses of the UNMC CON.
- Proposed Implementation date: Upon final approval.

## **1. Purpose of the Center**

**Vision of the Center:** To become a world leader in advancing research that can strengthen patient, family, and community engagement in management of chronic conditions.

**Mission of the Center:** The CCMC will bring together scientists, clinicians, educators, and consumers to improve the safety, quality, and efficiency of self-management of chronic conditions by harnessing the power of newly emerging mobile, wearable, and online technologies.

**History:** The UNMC CON developed a Center for Cardiovascular Studies in August 2009 after receiving a Developmental Center Grant (P20 grant mechanism) from the National Institutes of Health, National Institute for Nursing Research. The primary purpose of the P20 Center was to enhance and expand the infrastructure within the CON necessary to conduct interdisciplinary health promotion/disease prevention for cardiovascular research in rural settings using technology. As a result of the P20, faculty in the CON learned how to manage and direct a center. Faculty developed the essential processes and techniques required for a vibrant center and developed the staff that are essential for the transition to a new Center. Expertise has been gained in the use of common data elements across multiple pilot studies, recruitment of individuals living in rural areas of Nebraska, and in the use of technology to deliver self-management interventions and monitor outcomes in chronic conditions.

Based on the CON experience and lessons learned, the leadership and senior researchers determined that the College is well situated to make the Center model more inclusive of

other chronic health problems and scientists across UNMC and other University of Nebraska campuses. This Center will be built on the success of the earlier National Institutes of Health grant-funded center, but positioned for expansion and new areas of emphasis.

**Goals:** The goals of the Center are to:

- expand research resources to plan, promote, and support self-management research in patients, families, and communities to prevent and manage chronic health care conditions;
- expand the number of interdisciplinary, cross-campus externally funded studies focused on self-management support in patients, families, and communities experiencing chronic conditions or at high risk for chronic conditions;
- develop scientists at UNMC and in the University of Nebraska system with expertise in clinical and translational methods to support the discovery, dissemination, and implementation of evidence-based self-management strategies in typical community and clinical practice;
- accelerate the use of technologies for studies focused on patient, family, and community engagement in self-management for chronic conditions (technologies for measuring outcomes or delivering strategies/interventions) in urban, rural and underserved populations;
- provide the research infrastructure and a home for PhD and Doctor of Nursing Practice (DNP) students to be involved with interdisciplinary team science projects for development of their research and evidence-based practice skills; and
- plan for and develop sustainability of the center by building a portfolio of research, dissemination, and implementation science initiatives in collaboration with university, clinical, and community partners.

**These goals are consistent with the UNMC strategic plan in that they are focused on improving health disparities, enhancing collaborative research, and improving overall health of the region**

The Center is positioned to expand the focal areas to discovery, dissemination, and implementation of evidence based strategies focused on patient, family, and community engagement activities such as partnerships and collaborations essential to the management of chronic care. This Center will focus on patient-centered research related to: scalable and practical health promotion, illness prevention, and chronic disease self-management interventions that can be adopted and delivered in a wide variety of contexts; bio-behavioral factors that support adherence to medical management and healthful lifestyle behaviors for patients living with chronic conditions—with an explicit focus on health equity; cost-effective strategies for prevention and treatment of chronic conditions; and the process of translating evidence from discovery (efficacy, effectiveness) to dissemination (evidence-based policy, program, and practice uptake), and to sustainable implementation (delivery of evidence-based policy, program, and practices with a consistent and high level of fidelity) of self-management behaviors for individuals, families, and communities concerned with chronic conditions and presence of multiple comorbidities; and the use of technology to deliver self-management interventions or monitor care in both rural and urban populations where lack of access to care is a concern. Because the movement of evidence-based strategies from discovery to implementation is influenced by a broad range of factors across the ecological levels of individuals, families, communities, and health-supporting organizations, the center will also include community-based studies and engage in community-based participatory

research projects that influence chronic conditions through factors such as development and access to community resources.

Not only will this Center provide the infrastructure to expand important areas of research for UNMC, it will also help develop future scientists and faculty members. For example, such opportunities are vital for doctoral nursing education and support the education of doctoral students who may serve as faculty members in the future. Given that the CON has the only PhD in nursing program in Nebraska, and one of only a few Doctor of Nursing Practice programs in the state, it is vital to expand the opportunities for interdisciplinary discovery, dissemination and implementation science for these students. Many of these graduates accept faculty positions in schools of nursing in Nebraska, thereby contributing to solving Nebraska's nursing workforce shortage. Similarly, these opportunities are vital for doctoral students in other disciplines learning to engage in team science and for expanding the capacity of future faculty for translational and implementation science.

To systematically facilitate the development, dissemination, and implementation of evidenced based approaches that address self-management of chronic conditions, the Center will support three levels of clinical science: *Discovery* (efficacy, effectiveness), which expands knowledge in biomedical and behavioral sciences by moving basic scientific discovery to methods and technologies that improve patient care; *Dissemination*, which is the targeted distribution of information and intervention materials to a specific public health or clinical practice audience via multiple communication channels using planned strategies; and *Implementation* science, which is the study of processes, intervention characteristics, and context related to the application of evidence-based program, policy, and practice interventions with a goal of increase health equity through evidence-based practice. Across each of these broad scientific pursuits the Center considers patient engagement as critical for self-management recognizes and will address family needs and community resources to ensure a strong patient-centered partnership for self-management support.

**The Center for Patient Engagement in Chronic Care Management (CCCM)** is in compliance with criteria in Section 2.11 of the Bylaws of the University of Nebraska Board of Regents:

1. Interdisciplinary partners from UNMC College of Medicine (COM) and College of Public Health (COPH), College of Pharmacy (COP) currently act as committee chairs, mentors, and /or consultants for faculty in the CON. In addition, we have developed strong collaborative initiatives with faculty at the University of Nebraska at Omaha and the University of Nebraska-Lincoln. The new Health Science Education Complex at the University of Nebraska at Kearney and the strengthened collaborative efforts between UNMC and UNK also provide more opportunity for interdisciplinary team science. The Center will also assist with finding mentors and consultants external to UNMC and the NU system to support our research efforts and the efforts of doctoral students and clinical scholars on campus.
2. The multi-departmental, interdisciplinary center will more effectively bring self-management support with chronic care conditions research to urban and rural residents by creating a synergy and efficiency of research not previously visible on the state-wide campus of the UNMC CON.

## 2. Need and Demand for the Center

A Center is proposed because there would be no department or College that would have the interdisciplinary or transdisciplinary faculty to accomplish the goals of the CCCM. The CCCM will be a center for an interdisciplinary team of scientists to provide leadership, best practices, research, support and/or training focused on improving the management of chronic care. This CCCM will become a hub and provide the infrastructure to support collaboration and team science to build the science in chronic care. We have developed metrics with strategies to become a sustainable center. Our goal will be to increase collaboration with the other campuses at the University of Nebraska. Collaboration across our campuses already exists and the CCCM will only enhance our collaborations. For building science in chronic care management, we propose our center will eventually reduce cost (by consolidating software and training), increase efficiency (centralizing use of technology), improve outcomes (e.g. share common metrics) improve care (e.g. best practice guidelines with implementation science), and provide alignment (e.g. leverage the resources of the center for future programs or grant proposals).

The impact of chronic care. An estimated 133 million United States adults have a chronic disease and nearly 25% of those have two or more chronic diseases.<sup>1</sup> Increasing rates of chronic illness are associated with higher rates of hospitalization and nearly one third of all adults discharged from hospitals are estimated to have four or more chronic illnesses (Steiner & Friedman, 2013). Medicare beneficiaries with six or more chronic conditions have a readmission rate of 25%, compared to 9% for those with one or no chronic conditions.<sup>2</sup> **Self-management** is the process of patients assuming control of their health-related behaviors.<sup>3</sup> Ultimately, patients decide what they will eat, if they will exercise, and what medication(s) they will take. As healthcare experiences a paradigm shift from provider-centered to patient-centered care, health care professionals refocus on helping patients manage transitions in levels of care and encouraging collaboration in making informed decisions and developing health-related behaviors to improve their health outcomes.<sup>3,4</sup> Clinicians can act as health coaches, providing self-management support, collaborating with patients to establish goals, and helping patients develop problem-solving skills to foster self-management of their health care.<sup>3</sup>

Self-management support programs are one means of improving patient outcomes and reducing hospital readmissions and emergency room visits. Concerns with many self-management support programs, however, are the focus on factors external to the patient and on the use of a “one size fits all” approach in terms of resources and strategies. Lack of consideration for patient attributes such as cognition and patient activation are limitations of current programs that can have a negative impact on efficacy and efficient use of resources.

Successful programs require activated patients who have the knowledge, skills, and confidence necessary to manage their health care and engage in health promotion activities.<sup>4-8</sup> Demonstrating confidence, or self-efficacy, is an iterative process. Gaining confidence and becoming engaged are necessary for activation to occur.<sup>8</sup> Activation exists on a continuum where patients tend to move between levels depending on their health, self-efficacy, willingness to engage in self-management behaviors, and life situations.<sup>4-8</sup> Fully activated patients experience better health outcomes, such as physical and psychosocial functioning.<sup>9</sup>

Research has demonstrated that more highly activated patients with chronic care conditions have improved health outcomes and are more likely to self-manage their care and adhere to

recommendations from health care providers.<sup>10-13</sup> Self-management and adherence to recommendations results in decreased re-hospitalizations. There is also evidence that more educated patients and patients with adequate health literacy are more activated.<sup>14</sup> Thus, both patient activation and cognition should be considered when planning self-management programs.

In summary, effective self-management is essential for optimal patient outcomes in chronic care and evidence-based approaches exist, but have not had widespread dissemination and still have room for improvement.<sup>15,16</sup> Self-management interventions activate or engage patients to have the knowledge, skills, and confidence, or self-efficacy, to deal with chronic related problems encountered during daily living. Providing patient centered self-management education enables patients to self-identify problems and provides techniques to help them make decisions, take action, and alter behaviors as needed.<sup>9</sup> A major strength of this Center is interaction and collaboration among disciplines. Maximizing these interactions broadens knowledge beyond discipline boundaries. Support for two pilot studies will position investigators to obtain larger extramural support for full-scale intervention and outcomes studies with interdisciplinary teams that will contribute to the knowledge of how to improve current self-management approaches while also examining the process by which the current evidence-base can be integrated, with high fidelity, in current practices while monitoring patient outcomes with technological advancements.

### **Use of technology in studies addressing Patient Engagement in Chronic Care Management.**

The health care system is shifting from delivery of care in hospitals to delivery of care in the individual's community and home with the use of technology to monitor and visit patients in their home.<sup>17-19</sup> Other shifts in health care include focusing on and being reimbursed for value rather than volume of care and having primary care and prevention as the key drivers of the health care system rather than illness-focused care.<sup>20,21</sup> In the CON's P20 center, researchers delivered interventions that were found to be effective to improve health outcomes (i.e., weight loss, increased physical activity, etc.) in rural cardiovascular populations using technology. Thus, faculty have a strong track record in delivering interventions to the rural populations of Nebraska, directly in their communities using technologies that link people with caregivers and that promote self-monitoring of health status. Using technology to facilitate patient, family, and community knowledge of health status and feedback to and partnerships with health professionals can contribute to value-based health care and is well aligned with work at UNMC addressing telehealth and use of mobile and wearable technologies. This expanded Center will allow us to examine innovative, technologically-mediated, and patient-centered solutions that translate evidence-based principles into improved patient outcomes across urban and rural Nebraska.

### **3. Adequacy of Resources**

Numerous faculty members and graduate students are already engaged in research and scholarship related to these topics of self-management, chronic care and prevention of chronic conditions, economic analyses of new care delivery models, implementation science, and use of technology to facilitate partnerships between patients, families, communities and health professionals. However, there is no organizational unit to spur collaboration among them. Individuals already involved are listed below, although there are likely to be others who would be interested in affiliating with the Center. Faculty affiliations would not alter faculty members' appointments to their academic colleges or departments.

Affiliate status would provide access to Center resources (such as consultation, grant reviews, technical assistance) and regular communication of Center programs, seminars, and visiting scholar presentations.

### **Interdisciplinary Faculty Affiliates**

#### **College of Nursing**

Ann Berger, PhD, RN  
Susan Barnason, PhD, RN  
Catherine Bevil, PhD, RN  
Marlene Z. Cohen, PhD, RN  
Mary Cramer, PhD, RN  
Kate Fiandt PhD, RN  
Kathleen Hanna, PhD, RN,  
Julie Houfek, PhD, RN  
Bunny Pozehl, PhD, AP-RN  
Jana Pressler, PhD, RN  
Carol H. Pullen, EdD, RN  
Paula Schulz, PhD, RN  
Karen Schumacher, PhD, RN  
Lynnette Leeseberg Stampler,  
PhD, RN  
Nancy Waltman, PhD, RN  
Bernice Yates, PhD, RN  
Lani Zimmerman, PhD, RN

#### **College of Public Health**

Li-Wu Chen, PhD  
Patrik Johansson, MD,MPH  
Jane Meza, PhD  
Marsha Morien MA  
Risto Rautiainen, PhD  
Kendra Schmid, PhD  
Mohammad Siahpush, PhD  
Fernando Wilson PhD  
Paul Estabrooks PhD  
Chen, Baojiang PhD  
Fabio Almeida, PhD  
Jennie Hill PhD

#### **College of Medicine**

**Department of Family Medicine**  
Audrey Paulman, MD  
**Department of Internal Medicine**  
Debra Romberger, MD  
Jennifer Larsen MD  
Ted Mikuls, MD  
Steve Bonasera, MD  
Cyrus Desouza, MBBS  
Apar Ganti, MD  
Brian Lowes MD  
**Department of Pediatrics**  
Lois Starr MD  
Shirley Delair  
**Department of Surgery**  
Dmitry Oleynikov, MD  
Jason Johanning, MD  
Michael Moulton MD  
Quan Li MD  
Aleem Siddique MD  
**Department of Neurological  
Sciences**  
Matt Rizzo MD  
**Department of Psychiatry**  
Chris Kratochvil MD  
**Department of Ophthalmology**  
Quan Nguyen MD  
Vikas Gulati MD  
Tanvir Hussain, MDMSc

#### **College of Allied Health**

Joseph Norman, PhD  
Laura Bilek, PhD  
Patricia Hageman PhD  
Joseph Siu (Ka-Chun) PhD  
Mike Huckabee, PhD

#### **College of Pharmacy**

Christopher Schaffer,  
PharmD, BCPS  
Gary Cochran, PharmD  
Don Klepser, PhD

#### **Nebraska Medical Center**

Michael Ash, MD

#### **Other NU Campuses**

Ali Hesham PhD UNO  
Deepak Khazanchi PhD UNO  
Byrav Ramamurthy PhD UNL  
John Cresswell PhD UNL  
Shane Farritor PhD UNL  
Mathew Rice PhD UNK

### **Additional Physical Facilities Needed**

No additional physical facilities are needed at this time. Office and storage space are available in the Center for Nursing Science (CNS) building. The CNS building has adequate classroom and conference room space that the CCCM activities can utilize.



## **Budget Projections**

The budget has been projected for five years (see Tables 2 and 3). After that time, the plan is for the Center to be self-supporting through grants, contracts, and fees for research-related services. The CON will contribute 0.30 FTE release time for the Center Director, Lani Zimmerman, PhD, RN, FAAN. Through a combination of currently available institutional funds and guaranteed philanthropic funds, the CON will support a project coordinator for .5 FTE in Year One and 1.0 FTE thereafter, and statistical consulting to assist with data planning and analysis in Years Three through Five. Pilot study grant funds will be provided by the UNMC Vice Chancellor for Research in years Two through Five. Additional funds will be used to purchase software and equipment as needed for studies, particularly mobile and wearable devices to support the focus on technology; visiting scholars; and grant consultation. Please refer to Tables 2 and 3 for further details. The plan for self-sufficiency after five years is based on generating revenues from research services, continuing education, and contracts with businesses and other organizations for implementation services related to the Center's focus, and grants and contracts for research and program evaluation. The CCM will have its own operating account (cost center).

## **4. Organizational Structure and Administration**

Lani Zimmerman, PhD, RN, FAAN, Florence Neidfelt Endowed Professor of Nursing, will serve as the Center Director. Dr. Zimmerman served on the Executive Committee for the CON's P20 and is an accomplished researcher, focusing on understanding the most efficacious and effective strategies for fostering patient and family self-management of chronic conditions. Her work has centered primarily on people with cardiovascular problems and their families, and she has longstanding and extensive scientific collaborative relationships throughout UNMC, UNO, and UNL. As Center Director, she will have a direct reporting relationship to the Dean of the CON and consultative relationships with each of the three associate deans in the CON, reflecting the Center's tripartite focus on education, research, and practice/service.

The Center will be guided by an external Community Advisory Council and an internal Faculty Advisory Committee, comprised of members from all UNMC colleges. Members of the Community Advisory Council will consist of community members, community providers, and interdisciplinary faculty affiliates. The Community Advisory Council will be available to assist the Center in providing advice into the Center activities, thus aiding in the overall development and infrastructure of the Center. The Faculty Advisory Committee will consist of interdisciplinary faculty involved with the Center's activities. The Faculty Advisory Committee will coordinate Center activities, guide development of new resources supporting research, and facilitate interdisciplinary collaboration in the study of self-management in the context of chronic conditions, including management and prevention. Applications for faculty affiliate status will be widely distributed throughout the University of Nebraska Medical Center and the other NU campuses by direct invitation to faculty members already engaged in related research areas.

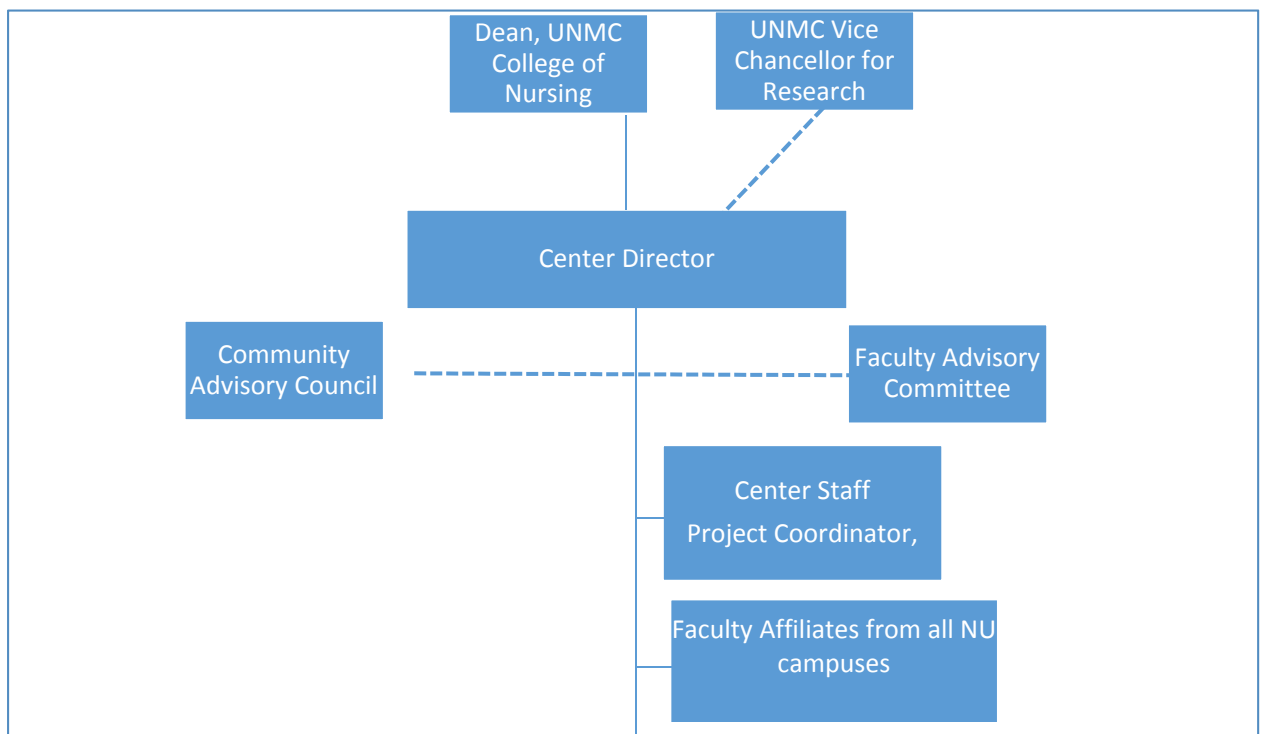
The director will be responsible for providing leadership in convening interprofessional and interdisciplinary faculty affiliates around key topical areas of interest to the group to accomplish the aims of the Center. She will partner with the Dean of the CON and the Center's Community Advisory Council to develop ongoing revenue streams to fund the administrative core of the Center. She will be responsible for ensuring adherence to sound fiscal practices in the management of the Center's budget and will hire key personnel for the administrative core of the Center as it grows. Dr. Zimmerman will provide leadership for the

Community Advisory Council and will oversee the work of the Center Coordinator. The Director will work closely with the CON's Associate Dean for Research and will utilize the resources of the CON's Niedfelt Nursing Research Center for presubmission proposal reviews, additional statistical consultation beyond that available within the Center, grant budget development and post-award monitoring, and manuscript preparation. She and faculty working with the Center may also seek consultation from the Center for Collaboration on Research Design and Analysis (CCORDA) in the UNMC College of Public Health. The Office of the Associate Dean for Transformational Practice and Partnerships in the CON will be available for assistance with translating research results to practice. Dr. Zimmerman will collaborate with the UNMC Vice Chancellor for Research and will provide input to large grant proposals that include components related to patient, family, and community engagement in management of chronic conditions.

The 0.50 FTE project coordinator will be responsible for communications related to the work of the Center, scheduling meetings and recording minutes, organizing presubmission grant proposal reviews in collaboration the Niedfelt Nursing Research Center, organizing visiting scholar events, and all other coordination and administrative support needs of the Center. As these needs increase and funds grow, additional support staff will be added.

Policies and procedures will be developed by the internal faculty advisory committee. Key strategic goals and plans will be developed through broadly based input from internal and external stakeholders and approved the Center's executive council.

The proposed organizational chart is shown below.



## **5. Partnerships with Business**

The potential exists for partnerships with business and industry. A 2013 Deloitte survey of employers' perceptions of health costs and strategies for managing costs <sup>22</sup> found that employers remain strongly concerned about managing costs through design of health plans and encouraging healthy lifestyle changes. The Center can add to the knowledge base of strategies for people with, or at risk for, chronic care conditions to optimally partner with health care providers to reduce risks and promote health. We believe large employer groups in Nebraska will see value in this work and we plan to pursue opportunities for partnerships with them. Given the Center's focus on dissemination and implementation, in addition to discovery, the potential exists for implementing chronic care management programs for employees in collaboration with business and industry, and evaluating the return on investment of programmatic initiatives. Similarly, opportunities exist for health education programs on these topics that can be beneficial to business and industry in promoting healthy workforces.

### **Examples of possible marketable products:**

- Replicable health promotion and health education programs for employee health and wellness;
- Toolkits containing strategies for initiating worksite chronic care management programs;
- Social media sites focused on self-management of chronic conditions;
- Mobile applications for self-management strategies for individuals, families, and communities; and
- Telehealth programs for self-management of chronic conditions.

## **6. Partnerships with Communities**

The potential exists for partnerships with communities with a high prevalence of residents at risk for or with chronic care conditions. There are many potential social media interventions that can be studied to look at changes in the social norms to affect behavioral changes and to support healthy lifestyles that include promotion of exercise and healthful nutrition, tobacco cessation and alcohol moderation, and promotion of safety and prevention of accidents and injuries.

### **Examples of Potentially Marketable Products:**

- Continuing education material for health care providers in communities can assist with the implementation of patient self-management and community engagement skills;
- Community-wide health education programs that emphasize self-management and promotion of healthy lifestyles with particular focus on prevention of the most prevalent chronic conditions;
- Accessible community education materials for individuals and families, through sites such as shopping and recreation areas, community centers, faith communities, and schools.

## **7. Collaborations with Higher Education Institutions External to the University**

### **Nature of relationships with other colleges and universities-**

Center investigators will have opportunities to pursue multisite studies with colleges throughout Nebraska and the Midwest. Additional opportunities could be pursued with Nebraska State and Community Colleges. Given the University of Nebraska's membership in the Big Ten, additional opportunities are available with the fourteen Big Ten schools, including participation by Center investigators in the Big Ten Cancer Consortium.

## **8. Constituencies to be Served**

- Junior faculty beginning a program of research or scholarship in this area
- DNP and PhD students in the College of Nursing
- PhD students in College of Public Health
- PhD students in other UNMC and NU colleges
- Health professions students
- Faculty interdisciplinary teams
- Students and faculty from related disciplines on the other three universities within the University of Nebraska system

### **Benefits:**

- Improved state of the art regarding: self-management care and patient, family, and community engagement skills
- Increased knowledge and skills for health care professional working with patients with chronic care conditions
- Common data elements for studies
- Education on new methodologies for dissemination and implementation science
- Improved health of patients with chronic care conditions
- Increased interdisciplinary collaboration on campus

## **9. Anticipated Outcomes, Significance, and Specific Measures of Success**

An Annual Progress Report, due to the College of Nursing dean and UNMC Vice Chancellor for Research by April 1 each year, will measure progress toward the CCCM aims and reports outcomes, significance, and successes for the overall center, as well as for the research studies. The ultimate outcome of the CCCM is to develop sustainability for the Center and ongoing interdisciplinary research for Patient, Family, and Community Engagement in Chronic Care Management. This sustainability is significant in that it will allow the CCCM to achieve the outcome of improving the health of Nebraskans.

One of the main measures of success is that the Principal Investigators of the pilot projects will obtain future funding to test their interventions on a larger scale, thereby improving the health of many other Nebraskans living in rural and urban areas.

The Evaluation Plan for the CCCM calls for comprehensive, systematic data collection of the Center's activities and outcomes. Specific activities with milestones and outcomes have been developed for each aim of the center. See Table 1. Evaluation methods and activities will be both qualitative and quantitative.

**Table 1. Aims, Activities and Milestones/Outcomes**

<b>Aim</b>	<b>Activities</b>	<b>Milestones/Outcomes</b>
1. Expand research resources to plan, promote, and support self-management research in patients, families, and communities to prevent and manage chronic health care problems	<ul style="list-style-type: none"> <li>• Continue to identify and add to the warehouse of biobehavioral measures and common data elements for chronic care management (e.g., Montreal objective of cognitive assessment (MOCA), health literacy, Patient Activation, etc.)</li> <li>• Facilitate consistency in measures and common data elements across studies</li> <li>• Facilitate mock review of proposals</li> </ul>	<p>Number of common data elements</p> <p>Number of mock reviews conducted</p> <p>Funding outcomes of proposals undergoing mock reviews</p>
2. Expand the number of interdisciplinary, externally funded studies focused on self-management support in patients, families, and communities experiencing chronic care conditions or at high risk for chronic care conditions.	<ul style="list-style-type: none"> <li>• Facilitate investigator applications for small pilot grants focused on patient engagement in chronic care management</li> <li>• Seek other UNMC funding for pilot work (e.g. UNeMed, Central States Center for Agriculture Safety and Health, Rural Futures Initiative).</li> <li>• Assist with searches for funding announcements for additional external funding for center scientists</li> <li>• Collaborate with other UNMC research and clinical centers</li> <li>• Collaborate with other NINR-funded nursing centers</li> <li>• Form an chronic condition interest group on campus for researchers who are focusing on behavioral change and patient engagement in chronic care (sponsor a monthly seminar)</li> </ul>	<p>By Year 2, have 2 pilot grants funded and by Year 4, an additional 2 pilot grants could be funded. Pilot grants lead to R series NIH grants or equivalent funding</p> <p>Review funding proposals</p> <p>By Year 4, we will have 2 large collaborative R01 external grant proposals submitted with a focus on chronic care management. This will assist the CON in applying for a T32 or a NIH P30 Center Grant or P50 Research Program Project and Center</p> <p># of interdisciplinary colleagues, both internal and external</p> <p>Annual number of funded grants (internal &amp; external) and publications</p> <p># of funded research and publications by members of the research interest group.</p>

Aim	Activities	Milestones/Outcomes
<p>3. Develop scientists with expertise in translational methods to support the discovery, dissemination, and implementation science related to self-management for chronic care conditions.</p>	<ul style="list-style-type: none"> <li>• Facilitate mentoring of Center scientists through manuscript and grant development</li> <li>• Link center scientists with interdisciplinary colleagues and consultation opportunities</li> <li>• Assist with building interdisciplinary research teams.</li> <li>• Offer workshops with campus and external experts on different translational research designs:               <ul style="list-style-type: none"> <li>○ Comparative effectiveness research (CER), community based participatory research (CBPR) with a focus on patient and community engagement. Work with Center for Clinical and Translational Research (CCTR) leadership, UNMC faculty development and staff to plan these workshops.</li> <li>○ Patient, family and Community Engagement Strategies</li> <li>○ Conducting an Economic Evaluation e.g. Cost effective Analysis (CEA) and quality of life adjusted years (QALY)</li> <li>○ Designing randomized clinical trials (RCTs), Dissemination and Implementation Science Studies</li> <li>○ Work with Center for Collaboration on Research Design and Analysis (CCORDA) to collaborate on projects and training opportunities e.g. pragmatic trials and optimizing trials.</li> <li>○ Ethical considerations for different research designs and use of technologies.</li> </ul> </li> <li>• Provide access to and training in use of software (e.g., data entry, RedCap) and monitoring equipment (e.g. actigraphs, wearable technology) for monitoring outcomes and delivering patient engagement interventions in chronic care management.</li> <li>• Provide grant writing course with an emphasis on developing proposals for “R” NIH mechanism or equivalent.</li> </ul>	<p>Increase # of research teams and on all five campuses</p> <p># of training sessions held</p> <p># of newly formed interdisciplinary research teams</p> <p># of workshops held</p>

Aim	Activities	Milestones/Outcomes
<p>4. Accelerate the use of technologies for studies focused on patient, family, and community engagement in self-management for chronic care conditions (technologies for measuring outcomes or delivering strategies/interventions) in urban, rural, and underserved populations.</p>	<ul style="list-style-type: none"> <li>• Collaborate with campus IT and telehealth experts to develop technologies on UNMC campus that deliver interventions (telehealth, mobile &amp; wearable technologies) and monitor outcomes</li> <li>• Develop services and products that can be marketed in relation to patient, family, and community engagement in chronic care management.</li> <li>• Develop interventions that can be tested in Small Business Innovation grants to increase patient/family engagement in chronic care management</li> <li>• Collaborate with other NU campuses e.g. computer science and engineering</li> <li>• Develop apps for use in research to deliver interventions and monitor outcomes for patient/family engagement in chronic care management.</li> <li>• Develop services and products that can be marketed for in relation to patient/family engagement in chronic care management.</li> </ul>	<p># of funded grants related to use of technology for self-management</p> <p># of services and products</p> <p># and type of research and commercialization ventures with UNL Engineering</p>
<p>5. Provide the research infrastructure and a home for PhD and Doctor of Nursing Practice (DNP) students to be involved with interdisciplinary team science projects for development of their research and evidenced-based practice skills.</p>	<ul style="list-style-type: none"> <li>• Engage doctoral students in nursing and other disciplines throughout UNMC and the NU system in research projects sponsored by the Center.</li> <li>• Publicize research seminars to doctoral students</li> </ul>	<p>Number of doctoral students on research teams</p> <p>Range of disciplines represented on research teams</p> <p>Number of doctoral students attending research seminars</p> <p>Number and titles of doctoral dissertations and capstone projects related to the Center's focus.</p>

Aim	Activities	Milestones/Outcomes
6. Plan for and develop sustainability of the center by building a portfolio of research, dissemination, and implementation initiatives in collaboration with university and community partners.	<ul style="list-style-type: none"> <li>• Create a website for advertising the Center's activities</li> <li>• Consult on projects throughout UNMC</li> <li>• Apply for external center funding</li> <li>• Partner with business partners to disseminate and implement evidence-based science to their institutions.</li> <li>• Partner with business entities to serve as beta testing site for new innovative technologies, apps, etc. for projects related to patient, family and community engagement in chronic care management</li> <li>• Generate income through workshops/short courses. Offer continuing education credit.</li> <li>• Create a business plan to generate revenue through Center services</li> <li>• Seek industry collaboration and funding for projects related to patient, family, and community engagement in chronic care management</li> </ul>	<p>Annual revenues</p> <p>Percent of revenues that support administrative infrastructure</p> <p>Positive income statements within five years for overall Center operations</p>

## 10. Centrality to Role and Mission of the Institution

The mission of UNMC is:

*"We are Nebraska Medicine & UNMC. Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care".*

The vision of UNMC is:

*"We are Nebraska Medicine & UNMC. Our mission is to lead the world in transforming lives to create a healthy future for all individuals and communities through premier educational programs, innovative research and extraordinary patient care".*

The Center will be focused on *innovative research* and will disseminate and diffuse research findings through UNMC's *premier educational programs* and *extraordinary patient care programs*. Faculty and graduate students will be supported in developing their research and career trajectories, through studying self-management of chronic conditions in individuals, caregivers, families, and at-risk populations. It is strongly aligned with the UNMC mission and vision statements because the focus is on creating a healthy future for individuals and communities. It will meet needs at Nebraska Medicine for new knowledge about ways to more fully enhance the patient experience, link the world class acute and critical care for which Nebraska Medicine is known with innovative community-based programs, and optimize the use of telehealth and mobile and wearable technologies. With newly formed productive research teams, the CON and the other UNMC colleges will be able to recruit graduate students who are interested in pursuing research in patient, family, and community engagement in chronic care management. Through research efforts in the Center, self-management interventions will be developed and tested using state-of-the-art technology to deliver interventions and monitor outcomes. Pilot study investigators who apply for funding through the Center will be junior researchers who are UNMC faculty members at the assistant professor level or intermediate career or senior faculty members who wish to more



fully develop research in the focal areas of the Center. Pilot funding from the Center is meant to facilitate submission of proposals for external funding of fully powered research that reaches more individuals and families, which aligns with UNMC goals to increase research collaboration and extramural funding.

#### **11. Potential for the Program to Contribute to Society and Economic Development**

Development and sustainability of the Center for Patient, Family, and Community Engagement in Chronic Conditions will facilitate research into the science of self-management beyond the physical boundaries of the UNMC campus and into rural areas. While economic development is not a specific aim of the center, the innovative use of technology to deliver and monitor outcomes will yield services that will contribute to improving key health indicators in communities throughout Nebraska. Innovative technological strategies for managing chronic conditions have the potential for technology transfer and commercialization. Additionally, expansion of the research enterprise at UNMC, in collaboration with other colleges throughout the University of Nebraska system, will yield more job opportunities for members of research teams and yield positive economic benefits for the communities in which the research is being conducted. This Center is also likely to generate continuing education fees and products.

#### **12. Consistency with Comprehensive Statewide Plan for Postsecondary Education: How this program would enhance relevant statewide goals for education.**

Nebraska's Comprehensive Statewide Plan for Postsecondary Education<sup>16</sup> includes research as its second major statewide goal, recognizing that research drives economic development, educational quality, and quality of life for Nebraskans. According to the Nebraska Coordinating Commission for Post-Secondary Education's most recent plan entitled *Comprehensive Statewide Plan for Postsecondary Education*, "Institutions will contribute to the health and prosperity of the people and to the vitality of the state through research and development efforts, technology transfer and technical assistance, and by attracting external funds to support these activities."<sup>23</sup>

The CCCM enhances the mentoring of junior researchers. The aims of mentoring are to increase research productivity and capacity and to build a research infrastructure that facilitates interdisciplinary collaborations across the colleges, departments, and campuses of the UNMC and UN system. This formal mentoring of researchers is expected to lead to funding of further research and could potentially impact recruitment of students at various levels to the UN system.

Once fully established and self-sustaining, the CCCM will provide increased opportunities for nursing, medical, public health, pharmacy, dental, and allied health students to conduct research projects with a focus on self-management of chronic care conditions that reach urban and rural underserved populations through the use of technology.

An additional goal of Nebraska's Comprehensive Statewide Plan for Postsecondary Education is to support workforce development for the state. The plan states, "higher education in Nebraska will be responsive to the workforce development and ongoing training needs of employers and industries to help sustain a knowledgeable, trained, and skilled workforce in both rural and urban areas of the state."<sup>23</sup> Incorporating research, dissemination, and implementation opportunities for doctoral students in nursing and other disciplines will contribute to addressing Nebraska's nursing workforce shortage by

supporting the education of doctoral students who may choose faculty careers following graduation. These activities will enhance opportunities for doctoral students across the university and NU system to learn team science and prepare for research, practice, and academic careers that require this new approach to building and deploying new knowledge.

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**TABLE 2: PROJECTED EXPENSES - NEW ORGANIZATIONAL UNIT**  
**Center for Patient, Family and Community Engagement in Chronic Care Management**

	FY 2017 Year 1		FY 2018 Year 2		FY 2019 Year 3		FY 2020 Year 4		FY 2021 Year 5		Total Cost
	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	FTE	Cost	
<b>Personnel</b>											
Clinical Faculty											
Research Faculty <sup>1,3</sup>	0.30	\$54,106	0.30	\$55,730	0.30	\$57,401	0.30	\$59,124	0.30	\$60,897	\$287,258
Clinical staff											
Other staff <sup>2,3</sup>	0.50	\$35,558	1.00	\$73,248	1.00	\$75,446	1.00	\$77,709	1.00	\$80,041	\$342,002
Subtotal	0.80	\$89,664	1.30	\$128,978	1.30	\$132,847	1.30	\$136,833	1.30	\$140,938	\$629,260
<b>Operating</b>											
General Operating <sup>4</sup>		\$10,000		\$10,000		\$10,000		\$10,000		\$10,000	\$50,000
Equipment											\$0
New or renovated space											\$0
Library/Information Resources											\$0
Other <sup>5</sup>		\$95,000		\$155,000		\$155,000		\$155,000		\$155,000	\$715,000
Subtotal		\$105,000		\$165,000		\$165,000		\$165,000		\$165,000	\$765,000
<b>Total Expenses</b>		\$194,664		\$293,978		\$297,847		\$301,833		\$305,938	\$1,394,260

<sup>1</sup> College of Nursing will provide 0.30 FTE release time for Center Director Dr. Lani Zimmerman, PhD, RN, FAAN, Florence Neidfelt Professor of Nursing.

<sup>2</sup> Project Coordinator hired at 0.5 FTE initially and will increase to 1.0 FTE in year 2.

<sup>3</sup> Annual salary increase of 3% annually. Benefits calculated at 23.2% for faculty and 29.3% for staff.

<sup>4</sup> Software; Travel and honorarium for workshop speakers.

<sup>5</sup> Faculty start-up funds; Grant & statistical consultations; Funding for Pilot Projects beginning in year 2.

**TABLE 3: REVENUE SOURCES FOR PROJECTED EXPENSES - NEW ORGANIZATIONAL UNIT  
Center for Patient, Family and Community Engagement in Chronic Care Management**

	FY 2017 Year 1	FY 2018 Year 2	FY 2019 Year 3	FY 2020 Year 4	FY 2021 Year 5	<b>Total</b>
Existing Funds						
UNMC Intramural <sup>1</sup>	\$119,664	\$68,978	\$72,847	\$76,833	\$80,938	\$419,260
Required New Public Funds						
1. State Funds	\$0	\$0	\$0	\$0	\$0	\$0
2. Local Funds	\$0	\$0	\$0	\$0	\$0	\$0
Tuition and Fees	\$0	\$0	\$0	\$0	\$0	\$0
Other Funding <sup>2</sup>	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$375,000
Philanthropic Funding <sup>3</sup>	\$0	\$150,000	\$150,000	\$150,000	\$150,000	\$600,000
<b>Total</b>	<b>\$194,664</b>	<b>\$293,978</b>	<b>\$297,847</b>	<b>\$301,833</b>	<b>\$305,938</b>	<b>\$1,394,260</b>

<sup>1</sup> Support from the College of Nursing and the Office of Vice Chancellor for Research.

<sup>2</sup> Nebraska Tobacco Settlement Biomedical Research and Development Fund.

<sup>3</sup> Confirmed philanthropic funding (NU Foundation).

TO: The Board of Regents Addendum VIII-B-1

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Sole source purchase of an Ion Trap/Triple Quadrupole Mass Spectrometer

RECOMMENDED ACTION: Approve the sole source purchase of an Ion Trap/Triple Quadrupole Mass Spectrometer for the University of Nebraska-Lincoln

PREVIOUS ACTION: None

EXPLANATION: This Mass Spectrometer will part of the Proteomics and Metabolomics Core Facility at the UNL Beadle Center. This instrument will be used for targeted metabolic analysis of plant, animal and environmental samples. A sole source purchase approval is requested because AB Sciex LLC is the only supplier of a hybrid instrument that includes an ion trap and a triple quadrupole necessary for proteomics and metabolomics research.

The purchase was reviewed and recommended for approval by the Business Affairs Committee.

PROJECT COST: \$605,567

SOURCE OF FUNDS: Nebraska Research Initiative Funds

SPONSORS: Prem S. Paul  
Vice Chancellor for Research & Economic Development

Christine A. Jackson  
Vice Chancellor for Business & Finance

RECOMMENDED: Harvey Perlman, Chancellor  
University of Nebraska-Lincoln

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-B-2

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Fund B University Program and Facilities Fees:  
2016-17 Allocation for the University of Nebraska-Lincoln

RECOMMENDED ACTION: Approve the Fund B University Program and Facilities Fees (UPFF)  
2016-17 Allocation for the University of Nebraska-Lincoln (UNL)

<u>UPFF Fund B</u> <u>Category</u>	<u>Approved</u> <u>Allocation</u> <u>2015-16</u>	<u>Recommended</u> <u>Allocation</u> <u>2016-17</u>	
Facilities:			
Recreation	\$920,000	\$928,000	
Existing Debt Service	4,245,626	4,245,626	
Nebraska Unions	4,622,707	4,892,233	
Campus Recreation	7,526,683	7,891,223	
Health Center	6,259,544	6,310,064	
Transit Services	<u>1,221,000</u>	<u>1,273,837</u>	
Total	<u>\$24,795,560</u>	<u>\$25,540,983</u>	
<u>Cost/Student/Semester:</u>			<u>Increase</u>
6 CH or less	\$321.16	\$333.79	\$12.63/3.9%
7 CH or more	574.58	584.20	9.62/1.7

PREVIOUS ACTION: April 10, 2015 –The Board of Regents approved the 2015-16 Fund B allocation.

May 30, 2014 – The Board approved a five-year agreement with the City of Lincoln to provide StarTran bus service on routes connecting UNL City and East Campuses to Nebraska Innovation Campus (NIC).

EXPLANATION: General policies governing the administration of University Program and Facilities Fees are set forth in Chapter 5.9 of the *Board of Regents' Policies*. This recommended allocation received appropriate student and administrative reviews as directed by Board of Regents policy. The proposed allocations are based on UPFF fees to be collected in 2016-17.

The fee increases are primarily attributable to increased personnel costs (including increases caused by the increase in the minimum wage), the rising cost of utilities and the annual increase in the Transit Services contracts with Star Tran.

The allocation was reviewed and recommended for approval by the Business Affairs Committee.



PROJECT COST: None

SOURCE OF FUNDS: None

SPONSORS: Juan N. Franco  
Vice Chancellor for Student Affairs

Christine A. Jackson  
Vice Chancellor for Business & Finance

RECOMMENDED: Harvey Perlman, Chancellor  
University of Nebraska-Lincoln

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-B-3  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Fund B, University Program and Facilities Fee:  
2016-17 Allocation for the University of Nebraska at Kearney

RECOMMENDED ACTION: Approve the Fund B, University Program and Facilities Fee (UPFF)  
2016-17 Allocation for the University of Nebraska at Kearney (UNK).

	Approved Allocation <u>2015-2016</u>	Recommended Allocation <u>2016-2017</u>	
UPFF Fund B			
<u>Category</u>			
Health Services	\$880,000	\$845,000	
Student Events	766,000	806,000	
Facilities	745,000	683,000	
Union	480,000	445,000	
Wellness Center	<u>543,000</u>	<u>524,000</u>	
TOTAL	<u>\$3,414,000</u>	<u>\$3,303,000</u>	
Cost/FT Student			<u>Increase</u>
Per Semester:	\$374	\$387	\$13/3.5%

PREVIOUS ACTION: April 10, 2015 – The Board of Regents approved the 2015-16 Fund B allocation.

EXPLANATION: General policies governing the administration of the University Program and Facilities Fees are set forth in Chapter 5.9 of the *Board of Regents' Policies*. This recommended allocation received appropriate student and administrative reviews as directed by Board of Regents' policy. The proposed allocations are based on the UPFF fees to be collected in 2016-17.

The majority of the increase (\$10 of the \$13) is due to the Student Events (SET) fee increasing from \$82 to \$92 per semester. The SET fee allows UNK students to attend all athletic events, plays, theatre performances and speaker forums at no charge. This is the third year of a planned three year phase-in increase in the Student Events fee. The increase is designed to help meet the transportation and travel costs for student athletes. In addition, to help manage risk, the transportation is now performed by a contracted third party versus coaches driving buses and vans. Without the SET increase, the Fund B increase would be less than one percent.

The allocation was reviewed and recommended for approval by the Business Affairs Committee.

PROJECT COST: None

SOURCE OF FUNDS: N/A

SPONSOR: Jane E. Sheldon  
Interim Vice Chancellor for Business & Finance

RECOMMENDED: Douglas A. Kristensen, Chancellor  
University of Nebraska at Kearney

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-B-4  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Fund B, University Program and Facilities Fees:  
2016-2017 Allocation for the University of Nebraska Medical Center

RECOMMENDED ACTION: Approve the Fund B, University Program and Facilities Fee (UPFF)  
2016-17 Allocation for the University of Nebraska Medical Center  
(UNMC).

<u>UPFF Fund B Category</u>	<u>Approved Allocation 2015-16</u>	<u>Recommended Allocation 2016-17</u>	
Student Health Services	\$383,440	\$383,440	
Supplemental Counseling	38,400	38,400	
Campus Recreation	<u>223,125</u>	<u>223,125</u>	
TOTAL	<u>\$644,965</u>	<u>\$644,965</u>	
Cost/FT Student Per Semester:	\$162.25	\$162.25	<u>Increase None</u>

PREVIOUS ACTION: April 10, 2015 – The Board of Regents approved the 2015-16 Fund B  
allocation.

EXPLANATION: The 2016-2017 recommended allocation for UPFF Fund B is the same as  
the 2015-2016 allocation.

General policies governing the administration of University Program and  
Facilities Fees are set forth in Chapter 5.9 of the *Board of Regents’  
Policies*. This recommended allocation was reviewed by appropriate  
student representatives and administrative personnel as directed by Board  
of Regents policy. The proposed allocation is based on 2015-16 student  
enrollment.

The allocation was reviewed and recommended for approval by the  
Business Affairs Committee.

PROJECT COST: None

SOURCE OF FUNDS: None

SPONSOR: Deborah L. Thomas  
Interim Vice Chancellor for Business & Finance

RECOMMENDED: Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-B-5  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Sole source purchase of Patient Simulators for Mobile Simulation Labs

RECOMMENDED ACTION: Approve the sole source purchase of four patient simulators

PREVIOUS ACTION: January 29, 2016 – The Board of Regents approved the sole source purchase of four mobile simulation labs.

EXPLANATION: UNMC is embarking on a “Nebraska Simulation in Motion (SIM-NE)” project. This project brings statewide, mobile simulation education with hands on training to first responders and Critical Access Emergency (CAE) department staff throughout Nebraska using state-of-the-art simulation equipment in a mobile simulation lab. Grant funding has been obtained to cover the simulation equipment.

The grant designates the brand of patient simulators to be used in this program by grantees. The four sets of patient simulators and capture system required to outfit the four mobile simulation labs are to be purchased through CAE Healthcare as directed per terms of grant agreement at a cost of \$1,136,470.

The purchase was reviewed and recommended for approval by the Business Affairs Committee.

PROJECT COST: \$1,136,470

SOURCE OF FUNDS: Private grant

SPONSOR: Deborah L. Thomas  
Interim Vice Chancellor for Business and Finance

RECOMMENDED: Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-B-6  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Purchase of network infrastructure equipment

RECOMMENDED ACTION: Approve the purchase of network switches

PREVIOUS ACTION: None

EXPLANATION: Switches (hardware) are the foundation of the UNMC/NM network that receive, process and forward data from one device to another. At UNMC/NM this amounts to over 28,000 devices that include PC's, printers, medical devices, and wireless access points.

The switches being purchased are from a UNMC contract that was bid consolidating the current and anticipated needs of all NU campuses (the anticipated NU wide savings from the volume pricing is approximately \$1.5M). They will upgrade all three layers of the network infrastructure; the Core; Distribution (supports buildings/areas); and Access (end user devices such as servers, printers in a small building or large building floor). The current infrastructure, or switches, do not have the capacity nor speed to handle increased "traffic" on the network resulting from the thousands of additional end devices that come with new buildings such as the Fred & Pamela Buffett Cancer Center and Surgical Center.

The purchase was reviewed and recommended for approval by the Business Affairs Committee.

PROJECT COST: \$1,010,054

SOURCE OF FUNDS: Revolving funds

SPONSOR: Deborah L. Thomas  
Interim Vice Chancellor for Business and Finance

RECOMMENDED: Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-B-7

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Sole source purchase for the 3D and Virtual Immersive Reality (VIR) Hub

RECOMMENDED ACTION: Approve the sole source purchase of 3D and virtual reality development hardware/software and stereoscopic CADWall

PREVIOUS ACTION: January 29, 2016 - The Board of Regents approved the selection of The Clark Enersen Partners and RDG Planning and Design to provide design consultant services for the new Global Center for Advanced Interprofessional Learning at University of Nebraska Medical Center.

October 9, 2015 – The Board approved the Program Statement for the Global Center for Advanced Interprofessional Learning.

EXPLANATION: There are three components to this agenda item: two sole source purchases of software and hardware for 3D and VIR Visualization Development Hub to develop such content as part of the iEXCEL project and disclosure of a related purchase of 3D-related software.

The first component is software and related hardware from EON Reality totaling \$398,075. Eon Reality has proprietary advanced technological capabilities not available from others in the marketplace. This will allow for the creation of 3D medical content used for education and enables UNMC to begin building a core group of talent for immediate and future efforts.

The second component is the stereoscopic CADWall from AVI-SPL totaling \$352,158. AVI-SPL is the provider for Barco technology including their CADWall. AVI-SPL is the selected technology integrator for Global Center for Advanced Interprofessional Learning and it is imperative for the campus to maintain continuity and compatibility of existing and new equipment by using the same integrator. The CADWall is ideal for creating immersive environments to aid in training and research.

The last component of this stage of the purchase is 3D-related software from Avizo and Unity which will not be a sole source purchase. This software enables 3D rendering for CT/MRI data sets (Avizo) and gaming software (Unity) to elevate content to another level. (This particular item will be part of the software purchases for iEXCEL and will be awarded based on normal purchasing processes. It is being disclosed here so the Board has a more complete picture of anticipated purchases.)

The purchases were reviewed and recommended for approval by the Business Affairs Committee.

PROJECT COST: \$910,233

SOURCE OF FUNDS: Private donations, revolving funds

SPONSOR: Deborah L. Thomas  
Interim Vice Chancellor for Business and Finance

RECOMMENDED: Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center

DATE: February 24, 2016



TO: The Board of Regents Addendum VIII-B-8

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Fund B, University Program and Facilities Fees:  
2016-17 Allocation for the University of Nebraska at Omaha

RECOMMENDED ACTION: Approve the Fund B, University Program and Facilities Fees (UPFF) 2016-17 Allocation for the University of Nebraska at Omaha (UNO)

UPFF Fund B Category	Approved Allocation 2015-16	Recommended Allocation 2016-17
Campus Recreation	\$1,340,091	\$1,367,794
Student Activities	643,567	662,874
Milo Bail Student Center	685,866	768,119
Milo Bail Student Center Bond Issue	999,428	999,428
HPER Addition & Renovation Bond Issue	3,450,690	3,450,690
Men's Athletics	786,752	810,355
Women's Athletics	615,214	633,670
Musical Groups	72,992	75,182
Health Services	843,399	856,201
Facilities	253,521	253,521
Intercampus Shuttle	<u>1,815,695</u>	<u>1,870,166</u>
TOTAL	<u>\$11,507,215</u>	<u>\$11,748,000</u>

<u>Cost/Student/Semester</u>			<u>Increase</u>
6 SCH or less	\$252.60	\$260.20	\$7.60/3%
7 SCH or more	418.95	431.50	12.55/3

PREVIOUS ACTION: April 10, 2015 – The Board of Regents approved the 2015-16 Fund B allocation.

EXPLANATION: General policies governing the administration of the University Program and Facilities Fees are set forth in Chapter 5.9 of the *Board of Regents' Policies*. This recommended allocation received appropriate student and administrative reviews as directed by Board of Regents policy.

The majority of the increase is accounted for by increasing services to students at the Student Center, athletic admission fees, and the intercampus shuttle.

Prior to FY 2015-16, UNO's Fund B portion of the UPFF was assessed at a flat fee and a per credit hour fee, up to a maximum of 12 student credit hours. Beginning with FY 2015-16, the Fund B fee was restructured and approved as two-tier flat fee, similar to the structure at UNL.

The allocation was reviewed and recommended for approval by the Business Affairs Committee.

PROJECT COST: None

SPONSORS: B.J. Reed  
Senior Vice Chancellor for Academic & Student Affairs

William E. Conley  
Vice Chancellor for Business & Finance

RECOMMENDED: John E. Christensen, Chancellor  
University of Nebraska at Omaha

DATE: February 24, 2016

TO: The Board of Regents  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Amend agreement with Learfield Communications, “Learfield” (formerly Nelligan Sports Marketing or “NSM”) for the University of Nebraska at Omaha.

RECOMMENDED ACTION: Approve the amended and restated University Rights Agreement between the University of Nebraska at Omaha and Learfield through fiscal year 2026.

PREVIOUS ACTION: April 10, 2015 – The Board of Regents approved a five-year grant of additional rights to Learfield in securing a campus wide official bank partner program sponsorship.  
April 13, 2012 - The Board of Regents approved a five-year agreement between the University of Nebraska at Omaha and NSM.

EXPLANATION: The UNO Athletics Department seeks support to extend the sports marketing agreement with Learfield through fiscal 2026. The proposed agreement provides UNO with guaranteed rights fees and capital subsidy payments along with sharing of amounts realized above certain revenue targets. The guaranteed rights fees start at \$1.15 million in 2016-17 and grow to \$1.75 million by 2025-26. Capital subsidies of \$200,000 will be realized in fiscal 2017 and 2018. Amounts above the targeted adjusted gross revenue thresholds (starting at \$2.29 million and growing to \$3.85 million) will be shared 50%.  
The former agreement was based on a sliding scale based on net revenues. The amount realized in fiscal 2015 under this arrangement was approximately \$740,000.  
Members of the public and the news media may obtain a copy of the proposed agreement in the Office of the University Corporation Secretary, 3835 Holdrege Street, Lincoln, Nebraska 68583, between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday, except University holidays.

SPONSOR: Trev Alberts  
Vice Chancellor for Athletic Leadership and Management

RECOMMENDED: John E. Christensen, Chancellor  
University of Nebraska at Omaha

DATE: March 16, 2016

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska Strategic Framework

RECOMMENDED ACTION: For Information Only

PREVIOUS ACTION: None

EXPLANATION: Attached is the current version of the Strategic Framework document.

SPONSOR: Hank M. Bounds, President  
University of Nebraska

DATE: February 24, 2016

## **INVESTING IN NEBRASKA'S FUTURE**

### **Strategic Planning Framework**

**2014-2016**

The University of Nebraska is a four-campus, public university which was created and exists today to serve Nebraskans through quality teaching, research, and outreach and engagement. We strive to be the best public university in the country as measured by the impact we have on our people and our state, and through them, the world. To do that, we must compete effectively with other institutions around the world for talented students and faculty. The future of Nebraska is closely tied to that of its only public university, and this framework guides university-wide and campus planning to help build and sustain a Nebraska that offers its citizens educational and economic opportunity and a high quality of life.

The framework consists of six overarching goals emphasizing access and affordability, quality academic programs, workforce and economic development, research growth, engagement with the state, and accountability. Each goal has a number of related objectives, strategies and accountability measures developed for Board and university-wide monitoring over a multi-year period. Companion documents include an implementation tool with metrics and the schedule for monitoring by the Board, as well as a dashboard reflecting progress.

The university's efforts will not be limited to these priorities, as we expect to be able to measure progress in other areas given the interrelatedness of the objectives, other priorities of the Board and the President, and the ongoing strategic planning efforts of the four campuses. Campus plans are consistent with this framework and operate within its broader goals. Each campus has established a set of quality indicators that provide a means to evaluate achievement and momentum related to its principal objectives.

1. The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate and professional education.
  - a. The university will strive to increase affordability and ensure qualified students are not denied access based on economic circumstances.
    - i. Secure state funding sufficient to support access to high quality programs.*
    - ii. Keep tuition increases moderate and predictable for students and families, consistent with goals of both access and quality.*
    - iii. Expand need-based financial aid and effectively market opportunity and major aid programs (e.g. Collegebound Nebraska, Buffett Scholars, Thompson Learning Communities).*
  - b. Increase the percentage of Nebraska high school graduates (the state “college-going rate”) who enroll at and graduate from the university.
    - i. Increase enrollment, consistent with quality imperatives, to serve Nebraska’s goals for increased educational attainment.*
    - ii. Increase each campus’s undergraduate freshman-to-sophomore retention rate each year, with a goal of exceeding the average of its peer institutions.*
    - iii. Increase each campus’s undergraduate six-year graduation rate, with a goal of exceeding the average of its peer institutions.*
  - c. Increase the diversity of those who enroll at and graduate from the university, employing measures permitted by state and federal law.
    - i. Engage in partnerships with other higher education institutions, K-12, and the private sector to increase diversity of students who seek a post-secondary education, employing measures permitted by state and federal law.*
  - d. Expand lifelong educational opportunities, including those for non-traditional and transfer students.
  - e. Promote adequate student preparation for success in higher education.
    - i. Engage in pilot programs with Nebraska high schools for development of high school academies in partnership with the university.*
    - ii. Provide timely and usable information to middle school students, parents, teachers and school administrators.*

- f. Promote ease of transfer to the university from other higher education institutions.
    - i. *Improve programs for transfer from community colleges, state colleges and other higher education institutions.*
  - g. Expand distance education programs, taking advantage of university-wide marketing and efficiencies and campus role and mission, strengths and entrepreneurship.
    - i. *The University will offer a variety of its academic programs by distance education through Online Worldwide in an effort to provide access to the University of Nebraska to the people of the state and beyond the boundaries of the state who are unable to enroll in programs offered only on campus.*
2. The University of Nebraska will build and sustain undergraduate, graduate and professional programs of high quality with an emphasis on excellent teaching.
- a. Recruit and retain exceptional faculty and staff, with special emphasis on building and sustaining diversity.
    - i. *To help ensure competitiveness, faculty salaries and incentives (awarded on the basis of merit) and fringe benefits should exceed the average of peer institutions.*
    - ii. *Develop and maintain programs to enhance work/life conditions of faculty and staff, including overall campus climate.*
    - iii. *Each campus shall endeavor to meet the university's ongoing commitments to faculty diversity, employing measures permitted by state and federal law.*
    - iv. *Increase support for professorships and named/distinguished chairs.*
  - b. Pursue excellence through focus on targeted programs in areas of importance to Nebraska where the university can be a regional, national and/or international leader (e.g. agriculture and natural resources, life sciences, information technology and architectural engineering).
    - i. *Programs of Excellence funding shall be increased when practicable and results of allocations shall be periodically reviewed for impact.*
    - ii. *Resource allocation shall take advantage of distinct campus roles and missions to achieve overall university goals.*
    - iii. *Campuses are encouraged to collaborate to achieve overall university goals.*
  - c. Provide opportunities for global engagement of faculty through international teaching, research and outreach exchanges, fellowships and collaborations.
    - i. *Increase faculty participation in Fulbright and related programs.*

3. The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector and other educational institutions.
  - a. Work to stem and reverse the out-migration of graduates and knowledge workers.
  - b. Increase proportion of the most talented Nebraska high school students who attend the University of Nebraska.
    - i. Increase enrollment of Nebraska students ranked in top 25% of their high school class.*
    - ii. Increase support for merit-based scholarships.*
  - c. To attract talent to the state, increase the number of nonresident students who enroll at the university.
    - i. Increase enrollment of nonresident undergraduate students at UNL, UNO and UNK.*
  - d. To adequately prepare students for the global economy, significantly increase opportunities for international study and engagement.
    - i. Significantly increase the number of undergraduates studying abroad, with the goal of ultimately providing the opportunity for every undergraduate to study abroad.*
    - ii. Significantly increase the number of international undergraduates and graduates studying at the university.*
  - e. Encourage and facilitate the commercialization of research and technology to benefit Nebraska.
  - f. Develop and strengthen internship and service learning opportunities with business, education, government, military, and nonprofit organizations.
  - g. Engage in partnerships with government and the private sector to develop regional economic strength.
  - h. Pursue excellence in educational attainment aligned with the long-term interests of the state.
    - i. Analyze areas of future workforce demand, including job and self-employment opportunities in non-growth rural communities and economically disadvantaged urban areas, and strengthen or develop curricula and programs appropriate to the university in alignment with those areas.*
    - ii. Develop educational programs that prepare students for the flexibility required to respond to the uncertainty of future workforce demands.*



iii. *Develop distance education and other educational programs that permit Nebraskans to prepare for jobs and opportunities to meet future workforce demands.*

4. The University of Nebraska will pursue excellence and regional, national and international competitiveness in research and scholarly activity, as well as their application, focusing on areas of strategic importance and opportunity.

a. Increase external support for research and scholarly activity.

i. *Increase federal support for instruction, research and development, and public service.*

ii. *Inventory and forecast infrastructure (physical facilities, information technology, equipment) necessary to support continued growth in research activity and secure private and public support to eliminate deficiencies.*

b. Increase undergraduate and graduate student participation in research and its application.

c. Encourage and support interdisciplinary, intercampus, inter-institutional and international collaboration.

d. Improve the quantity and quality of research space through public and private support.

e. Focus resources on areas of strength in research where the university has the opportunity for regional, national and international leadership and in areas of strategic importance to the health and economic strength of Nebraska (e.g. agriculture and life sciences; natural resources, especially water; prevention and cure of diseases such as cancer; and early childhood education).

i. *Invest resources through the Nebraska Research Initiative, Programs of Excellence and other sources to build capacity and excellence in research.*

5. The University of Nebraska will serve the entire state through strategic and effective engagement and coordination with citizens, businesses, agriculture, other educational institutions, and rural and urban communities and regions.

a. Support economic growth, health and quality of life through policy initiatives consistent with university mission.

b. Recognize and reward faculty innovation and effectiveness in outreach and engagement.

- c. Support Nebraska's economic development.
    - i. Partner and collaborate with government and the private sector to attract, retain, and spur business development and economic opportunity.*
    - ii. Use university research and other resources to foster more effective relationships with the private sector.*
  - d. Support entrepreneurship education, training and outreach.
  - e. Collaborate with the public and private sectors to build successful regional, multistate, international linkages.
  - f. Use university resources to engage Nebraskans outside cities where our major campuses are located.
    - i. Effectively use the Nebraska Rural Initiative and other university-wide and campus programs to develop excellence in supporting community development while creating quality economic opportunities throughout rural Nebraska.*
    - ii. Effectively use regional research and extension operations and statewide extension for engagement with the university.*
6. The University of Nebraska will be cost effective and accountable to the citizens of the state.
- a. Support the development of a sustainable university environment.
    - i. Build a comprehensive long-range capital facilities planning process and provide a six-year capital construction plan, updated quarterly.*
    - ii. Implement the second phase of LB 605 to repair, renovate and/or replace specific university facilities.*
    - iii. Campuses shall pursue energy efficiency.*
    - iv. Campuses shall promote through policies and scheduling effective utilization of university facilities.*
  - b. Maintain a safe environment for students, faculty, staff and visitors.
    - i. Develop and regularly monitor fire safety plans and procedures.*
    - ii. Collaborate with state and local government in disaster planning.*
    - iii. Develop and test campus plans for emergencies and disasters.*

- c. Allocate resources in an efficient and effective manner.
  - i. *Use best practices in procurement and construction and other business engagement.*
  - ii. *Leverage roles and missions of campuses to find savings and cost reductions through academic, administrative and business process efficiencies and effectiveness.*
  - iii. *Develop and report on matrix of business health indicators, including university debt.*
- d. Maximize and leverage non-state support.
  - i. *Promote entrepreneurship and revenue-generating opportunities.*
  - ii. *Collaborate with the University of Nebraska Foundation to secure private support for university priorities.*
- e. Create and report performance and accountability measures.
- f. Maximize potential of information technology to support the university's activities.
- g. Provide accurate and transparent information to the public about college costs and student learning and success outcomes.
  - i. *Participate in the Student Achievement Measure (SAM) program.*
  - ii. *Participate in the National Survey of Student Engagement.*
  - iii. *Monitor student achievements on licensing and professional examinations.*
  - iv. *Participate and measure effectiveness of national pilot projects on learning assessment with the goal of adopting university measurements.*
- h. Implement awareness and education programs to assist all students in management of personal financial matters.

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska Strategic Framework Accountability Measures

RECOMMENDED ACTION: For Information Only

PREVIOUS ACTION: None

EXPLANATION: Attached is the current version of the Strategic accountability measures.

SPONSOR: Hank M. Bounds, President  
University of Nebraska

DATE: February 24, 2016

## INVESTING IN NEBRASKA’S FUTURE

### Strategic Planning Framework 2014-2016 Accountability Measures

**1. State Funding (1-a-i)**

*Secure state funding sufficient to support access to high quality programs.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2016-17	Maintain the State’s proposed funding increase of 3.4% and manage the cost effectiveness of the University so that tuition increases are kept at a moderate and predictable 2.5% rate of increase.	May 2016	Business
FY 2017-18	To be developed as part of the 2017-19 biennial budget request planning process.	June 2017	Business
FY 2018-19	To be developed as part of the 2017-19 biennial budget request planning process.	May 2018	Business

**2. Tuition (1-a-ii)**

*Keep tuition increases moderate and predictable for students and families, consistent with goals of both access and quality.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2016-17	Maintain the State’s proposed funding increase of 3.4% and manage the cost effectiveness of the University so that tuition increases are kept at a moderate and predictable 2.5% rate of increase.	May 2016	Business
FY 2017-18	To be developed as part of the 2017-19 biennial budget request planning process.	June 2017	Business
FY 2018-19	To be developed as part of the 2017-19 biennial budget request planning process.	May 2018	Business

### 3. Need-based Financial Aid (1-a-iii)

*Expand need-based financial aid and effectively market opportunity and major aid programs (e.g. Collegebound Nebraska, Buffett Scholars, Thompson Learning Communities).*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2014-15	Raise at least \$9 million in private funds (endowment and/or spendable)	<del>Jan. 2016</del> March 2016	Academic
FY 2015-16	Raise at least \$9 million in private funds (endowment and/or spendable)	Jan. 2017	Academic
FY 2016-17	Raise at least \$9 million in private funds (endowment and/or spendable)	Jan. 2018	Academic

*Reporting date moved from September to January beginning in 2016 due to availability of data.*

*January 2016 report moved to March 2016 at the request of the President and Provost.*

### 4. Enrollment (1-b-i)

*Increase enrollment, consistent with quality imperatives, to serve Nebraska's goals for increased educational attainment.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2016	<ul style="list-style-type: none"> <li>• UNL increase enrollment 4.6%</li> <li>• UNO increase enrollment 4.0%</li> <li>• UNK &amp; UNMC increase enrollment over previous year</li> </ul>	Nov. 2016	Academic
Fall 2017	<ul style="list-style-type: none"> <li>• UNL increase enrollment 3.0%</li> <li>• UNO increase enrollment 4.0%</li> <li>• UNK &amp; UNMC increase enrollment over previous year</li> </ul>	Oct. 2017	Academic
Fall 2018	<ul style="list-style-type: none"> <li>• UNL increase enrollment 2.9%</li> <li>• UNO increase enrollment 4.5%</li> <li>• UNK &amp; UNMC increase enrollment over previous year</li> </ul>	Nov. 2018	

*Oct. 2015 – Metrics referred to the Academic Affairs committee for further discussion.*

### 5. Graduation Rates (1-b-iii)

*Increase each campus's undergraduate six-year graduation rate, with a goal of exceeding the average of its peer institutions.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
2013-14 Academic Year	<ol style="list-style-type: none"> <li>1) Each campus will maintain or reach the average six-year graduation rate of its peers.</li> <li>2) All prospective and current undergraduate students are regularly informed and assisted in obtaining the benefit of the University's four-year graduation guarantee.</li> </ol>	<del>Jan. 2016</del> March 2016	Academic
2014-15 Academic Year	<ol style="list-style-type: none"> <li>1) Each campus will maintain or reach the average six-year graduation rate of its peers.</li> <li>2) All prospective and current undergraduate students are regularly informed and assisted in obtaining the benefit of the University's four-year graduation guarantee.</li> </ol>	Jan. 2017	Academic
2015-16 Academic Year	<ol style="list-style-type: none"> <li>1) Each campus will maintain or reach the average six-year graduation rate of its peers.</li> <li>2) All prospective and current undergraduate students are regularly informed and assisted in obtaining the benefit of the University's four-year graduation guarantee.</li> </ol>	Jan. 2018	Academic

*January 2016 report moved to March 2016 at the request of the President and Provost.*

**6. Faculty Merit Compensation (2-a-i)**

*To help ensure competitiveness, faculty salaries and incentives (awarded on the basis of merit) and fringe benefits should exceed the average of peer institutions.*

<b>Reporting Period</b>	<b>Accountability Measure</b>	<b>Report Date</b>	<b>Reporting Committee</b>
FY 2015-16	<ol style="list-style-type: none"> <li>1) All salary increases should be awarded, to the extent possible, on the basis of merit.</li> <li>2) Average faculty salaries on each campus shall meet or exceed the midpoint of peers.</li> <li>3) Once the midpoint of peers has been met or exceeded, an exceptional merit fund shall be established to provide additional incentives related to performance.</li> </ol>	May 2016	Business
FY 2016-17	<ol style="list-style-type: none"> <li>1) All salary increases should be awarded, to the extent possible, on the basis of merit.</li> <li>2) Average faculty salaries on each campus shall meet or exceed the midpoint of peers.</li> <li>3) Once the midpoint of peers has been met or exceeded, an exceptional merit fund shall be established to provide additional incentives related to performance.</li> </ol>	June 2017	Business
FY 2017-18	<ol style="list-style-type: none"> <li>1) All salary increases should be awarded, to the extent possible, on the basis of merit.</li> <li>2) Average faculty salaries on each campus shall meet or exceed the midpoint of peers.</li> <li>3) Once the midpoint of peers has been met or exceeded, an exceptional merit fund shall be established to provide additional incentives related to performance.</li> </ol>	May 2018	Business

**7. Faculty Diversity (2-a-iii)**

*Each campus shall endeavor to meet the university's ongoing commitments to faculty diversity, employing measures permitted by state and federal law.*

<b>Reporting Period</b>	<b>Accountability Measure</b>	<b>Report Date</b>	<b>Reporting Committee</b>
Fall 2014	<ol style="list-style-type: none"> <li>1) Increase faculty diversity, employing measures permitted by state and federal law.</li> <li>2) Report on the diversity of the faculty and the relative rate of change in faculty composition as compared to peers.</li> </ol>	Jan. 2016	Academic
Fall 2015	<ol style="list-style-type: none"> <li>1) Increase faculty diversity, employing measures permitted by state and federal law.</li> <li>2) Report on the diversity of the faculty and the relative rate of change in faculty composition as compared to peers.</li> </ol>	Jan. 2017	Academic
Fall 2016	<ol style="list-style-type: none"> <li>1) Increase faculty diversity, employing measures permitted by state and federal law.</li> <li>2) Report on the diversity of the faculty and the relative rate of change in faculty composition as compared to peers.</li> </ol>	Jan. 2018	Academic

**8. Nebraska Top 25% (3-b-i)**

*Increase enrollment of Nebraska students ranked in top 25% of their high school class.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2016	Maintain enrollment of first-time freshmen ranked in the top quartile of their high school graduating class to 50.0% or greater.	Nov. 2016	Academic
Fall 2017	Maintain enrollment of first-time freshmen ranked in the top quartile of their high school graduating class to 50.0% or greater.	Oct. 2017	Academic
Fall 2018	Main enrollment of first-time freshmen ranked in the top quartile of their high school graduating class to 50.0% or greater.	Nov. 2018	Academic

**9. Merit-based Scholarships (3-b-ii)**

*Increase support for merit-based scholarships.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2014-15	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 2016 March 2016	Academic
FY 2015-16	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 2017	Academic
FY 2016-17	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 2018	Academic

*Reporting date moved from September to January beginning in 2016 due to availability of data.*

*January 2016 report moved to March 2016 at the request of the President and Provost.*

**10. Nonresident Student Enrollment (3-c-i)**

*Increase enrollment of nonresident undergraduate students at UNL, UNO and UNK.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2016	Increase the number of domestic nonresident undergraduate students by 1.5% percent annually.	Nov. 2016	Academic
Fall 2017	Increase the number of domestic nonresident undergraduate students by 1.5% percent annually.	Oct. 2017	Academic
Fall 2018	Increase the number of domestic nonresident undergraduate students by 1.5% percent annually.	Nov. 2018	Academic

**11. Workforce Development (3-h-i and 3-h-iii)**

*Analyze areas of future workforce demand, including job and self-employment opportunities in non-growth rural communities and economically disadvantaged urban areas, and strengthen or develop curricula and programs appropriate to the university in alignment with those areas. (3-h-i) Develop distance education and other educational programs that permit Nebraskans to prepare for jobs and opportunities to meet future workforce demands. (3-h-iii)*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2015	Address program alignment revisions to meet workforce needs based on Fall 2011 data.	March 2016	Academic
Fall 2016	Address program alignment revisions to meet workforce needs based on Fall 2011 data.	April 2017	Academic
Fall 2017	TBD	March 2018	Academic



## 12. Research (4-a-i)

*Increase federal support for instruction, research and development, and public service.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2014-15	Increase UNL and UNMC federal research expenditures by 20% more than the weighted total federal appropriations per year on a three-year rolling average.	March 2016	Academic
FY 2015-16	Increase UNL and UNMC federal research expenditures by 20% more than the weighted total federal appropriations per year on a three-year rolling average.	April 2017	Academic
FY 2016-17	Increase UNL and UNMC federal research expenditures by 20% more than the weighted total federal appropriations per year on a three-year rolling average.	March 2018	Academic

## 13. Entrepreneurship (5-d)

*Support entrepreneurship education, training and outreach.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
2015	Increase over FY 2014 baseline numbers and evaluate and modify annual targets as appropriate 1) Entrepreneurship education a) Entrepreneurship student credit hours – 6,811 b) Number of entrepreneurship students – 2,292 2) Entrepreneurship outreach a) Attendees at seminars provided – 16,486 b) Website visits – 205,266 3) Business creation a) NU-affiliated companies formed – 11 b) NU licensing activity i) Patents disclosed – 164 ii) Patents filed – 200 iii) Patents awarded - 38 4) Business support a) Clients served – 9,542 b) Average investment - \$45,000 c) Average sales increase - \$64,000 d) Total jobs created – 951 e) Total jobs saved – 295	March 2016	Academic
2016	Increase over previous year. Evaluate and modify annual targets as appropriate.	April 2017	Academic
2017	Increase over previous year. Evaluate and modify annual targets as appropriate.	March 2018	Academic

## 14. LB 605 (6-a-ii)

*Implement the second phase of LB 605 to repair, renovate and/or replace specific university facilities.*

**A capstone report on LB 605 was presented to the Board of Regents in January 2011.**

### 15. Business Process Efficiencies (6-c-ii)

*Leverage roles and missions of campuses to find savings and cost reductions through academic, administrative and business process efficiencies and effectiveness.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
2015 Calendar Year	<ol style="list-style-type: none"> <li>1) Short-Term Cash/Investments: Exceed average of similar fund types</li> <li>2) Endowments: Exceed average of similar fund types</li> <li>3) Debt: Maintain Aa1 rating; exceed 1.15 coverage</li> <li>4) Capital: Report on Capital Queue</li> <li>5) Human Resources: Meet midpoint of peers in faculty and staff salaries</li> </ol>	<ol style="list-style-type: none"> <li>1) June 2016</li> <li><del>2) January 2016</del> December 2015</li> <li><del>3) January 2016</del> December 2015</li> <li>4) Quarterly</li> <li>5) May 2016</li> </ol>	Business
2016 Calendar Year	<ol style="list-style-type: none"> <li>1) Short-Term Cash/Investments: Exceed average of similar fund types</li> <li>2) Endowments: Exceed average of similar fund types</li> <li>3) Debt: Maintain Aa1 rating; exceed 1.15 coverage</li> <li>4) Capital: Report on Capital Queue</li> <li>5) Human Resources: Meet midpoint of peers in faculty and staff salaries</li> </ol>	<ol style="list-style-type: none"> <li>1) June 2017</li> <li>2) January 2017</li> <li>3) January 2017</li> <li>4) Quarterly</li> <li>5) June 2017</li> </ol>	Business
2017 Calendar Year	<ol style="list-style-type: none"> <li>1) Short-Term Cash/Investments: Exceed average of similar fund types</li> <li>2) Endowments: Exceed average of similar fund types</li> <li>3) Debt: Maintain Aa1 rating; exceed 1.15 coverage</li> <li>4) Capital: Report on Capital Queue</li> <li>5) Human Resources: Meet midpoint of peers in faculty and staff salaries</li> </ol>	<ol style="list-style-type: none"> <li>1) June 2018</li> <li>2) January 2018</li> <li>3) January 2018</li> <li>4) Quarterly</li> <li>5) May 2018</li> </ol>	Business

*In September 2014 and August 2015, it was stated that the short-term investment item will be considered for sunsetting after a discussion with the Business Affairs Committee.*

## 16. Student Learning Assessment (6-g)

*Provide accurate and transparent information to the public about college costs and student learning and success outcomes.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2015	<ol style="list-style-type: none"> <li>1) Annual or other periodic review, as available, by the Board of performance on standardized examinations and surveys, including the National Survey of Student Engagement and professional licensure examinations.</li> <li>2) Annual review by the Board of participation in pilot programs to measure student learning outcomes, such as the Collegiate Learning Assessment.</li> </ol>	July 2016	Academic
Fall 2016	<ol style="list-style-type: none"> <li>1) Annual or other periodic review, as available, by the Board of performance on standardized examinations and surveys, including the National Survey of Student Engagement and professional licensure examinations.</li> <li>2) Annual review by the Board of participation in pilot programs to measure student learning outcomes, such as the Collegiate Learning Assessment.</li> </ol>	August 2017	Academic
Fall 2017	<ol style="list-style-type: none"> <li>1) Annual or other periodic review, as available, by the Board of performance on standardized examinations and surveys, including the National Survey of Student Engagement and professional licensure examinations.</li> <li>2) Annual review by the Board of participation in pilot programs to measure student learning outcomes, such as the Collegiate Learning Assessment.</li> </ol>	July 2018	Academic

## 17. Global Engagement - Study Abroad (3-d-i)

*Significantly increase the number of undergraduates studying abroad, with the goal of ultimately providing the opportunity for every undergraduate to study abroad.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Academic Year 2014-15	By 2019-20, the University shall increase the number of students who have studied abroad by 50%. Using the 2011-12 academic year as a baseline, when 1,187 students participated in study abroad, the number of students studying abroad by 2019-20 will increase to 1,780.	July 2016	Academic
Academic Year 2015-16	By 2019-20, the number of students who have studies abroad will reach 1,780, an increase of 50% over the number in 2011-12.	August 2017	Academic
Academic Year 2016-17	By 2019-20, the number of students who have studies abroad will reach 1,780, an increase of 50% over the number in 2011-12.	July 2018	Academic

*Metric was revised in January 2015 by the Academic Affairs committee with the consent of the incoming chair.*

**18. Global Engagement – International Student Enrollment (3-d-ii)**

*Significantly increase the number of international undergraduates and graduates studying at the university.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2016	By 2020-21, the University shall increase the number of international students enrolled to 6,036. Using the base academic year 2010-11 when 3,018 international students were enrolled, the University will achieve slightly more than 7% growth compounded each year to reach the goal.	Nov. 2016	Academic
Fall 2017	Continue progress toward doubling by 2020-21 the enrollment of international students by achieving average annual growth of slightly more than 7%.	Oct. 2017	Academic
Fall 2018	Continue progress toward doubling by 2020-21 the enrollment of international students by achieving average annual growth of slightly more than 7%.	Nov. 2018	Academic

*Base academic year in the metric was corrected from 2009-10 to 2010-11 in November 2013; the number of students was unchanged.*

**19. Distance Education (1-g-i)**

*The University will offer a variety of its academic programs by distance education through Online Worldwide in an effort to provide access to the University of Nebraska to the people of the state and beyond the boundaries of the state who are unable to enroll in programs offered only on campus.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Academic Year 2015-16	Growth in unduplicated headcount of distance only students, both resident and nonresident, at or above the national average growth for public four-year institutions as reported via IPEDS.	Nov. 2016	Academic
Academic Year 2016-17	Growth in unduplicated headcount of distance only students, both resident and nonresident, at or above the national average growth for public four-year institutions as reported via IPEDS.	Oct. 2017	Academic
Academic Year 2017-18	Growth in unduplicated headcount of distance only students, both resident and nonresident, at or above the national average growth for public four-year institutions as reported via IPEDS.	Nov. 2018	Academic

*Annual reporting moved from July to October/November beginning in 2015.*

*Oct. 2015 - New metric approved by the Academic Affairs committee, but not yet endorsed by the full Board of Regents.*

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska Calendar of establishing and reporting  
accountability measures

RECOMMENDED ACTION: For Information Only

PREVIOUS ACTION: None

EXPLANATION: Attached is a calendar of establishing and reporting accountability  
measures.

SPONSOR: Hank M. Bounds, President University  
of Nebraska

DATE: February 24, 2016

# Strategic Framework Accountability Measure Reporting and Updating Calendar

Revised for March 18, 2016 meeting

<b>Board Meeting Date</b>	<b><u>Academic Affairs Committee</u></b>	<b><u>Business Affairs Committee</u></b>
January 29, 2016	<del>Graduation Rates [1-b-iii]</del> <del>Faculty Diversity [2-a-iii]</del> <del>Need-based Financial Aid [1-a-iii]</del> <del>Merit-based Scholarships [3-b-ii]</del>	Administrative/Business Efficiencies [6-c-ii] <i>(Endowment, Debt Management, Capital Queue)</i> (were reported in December 2015)
March 18, 2016	Workforce Development [3-h-i & iii] Entrepreneurship [5-d] Research [4-a-i] Graduation Rates [1-b-iii] <i>(moved from January)</i> Need-based Financial Aid [1-a-iii] <i>(moved from January)</i> Merit-based Scholarships [3-b-ii] <i>(moved from January)</i>	Administrative/Business Efficiencies [6-c-ii] <i>(Capital Queue)</i>
April 14, 2016	UNL campus visit with discussion of campus strategic plan and performance indicators.	
May 26, 2016	None	State Funding [1-a-i] Tuition [1-a-ii] Faculty Merit Compensation [2-a-i] Administrative/Business Efficiencies [6-c-ii] <i>(Short-term Cash/Investments, Capital Queue, HR)</i>
July 22, 2016	Study Abroad [3-d-i] Student Learning Assessment [6-g]	None
September 2, 2016	UNMC campus visit with discussion of campus strategic plan and performance indicators.	
September 16, 2016	None	Administrative/Business Efficiencies [6-c-ii] <i>(Capital Queue)</i>
November 17, 2016	Enrollment [1-b-i] Nebraska Top 25% [3-b-i] Nonresident Student Enrollment [3-c-i] International Student Enrollment [3-d-ii] Distance Education [1-g-i]	None

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska Strategic Dashboard Indicators

RECOMMENDED ACTION: For Information Only





















PREVIOUS ACTION: None

EXPLANATION: Attached is the current version of the Strategic Framework Indicators.

SPONSOR: Hank M. Bounds, President  
University of Nebraska





DATE: February 24, 2016




## University of Nebraska Strategic Dashboard Indicators (Updated as of January 29, 2016)

State Funding Change (1.a.i) FY2015-16		Tuition Change (1.a.ii) FY 2015-16		Enrollment Change (1.b.i) Fall 2015		Retention (1.b.i) Fall 2014		Need-Based Aid (1.a.iii) FY2013-14				
Target	Outcome	Target	Outcome	Target	Outcome	Target	Outcome	Target	Outcome			
	State funding and cost mgmt.= moderate and predictable tuition 3.9%		State funding and cost mgmt.= moderate and predictable tuition 1.75% 2015-16 2.5% 2016-17		UNL= 2.7% increase		UNO= 3.0% increase		80% retention rate		Raise at least \$9 million in private funds	Raised \$11.8 million
Women Faculty (2.a.iii) Fall 2014		Minority Faculty (2.a.iii) Fall 2014		Top 25% Enrollment (3.b.i) Fall 2015		Nonresident Students (3.c.i) Fall 2015		Merit-Based Aid (3.b.ii) FY2013-14				
Target	Outcome	Target	Outcome	Target	Outcome	Target	Outcome	Target	Outcome			
	Increase over 2013 2014=35.00% 2013=35.03%		Increase over 2013 2014=19.06% 2013=18.52%		Increase to 50%		Increase 1.5% over 2013 +7.1%		Raise at least \$9 million in private funds	Raised \$16.0 million		
Study Abroad (3.d.i) AY2013-14		International Students (3.d.ii) Fall 2015		Distance Education (3.g.i) AY2013-14		Six-Year Graduation Rate (1.b.iii) AY2012-13						
Target	Outcome	Target	Outcome	Target	Outcome	Campus	Target	Outcome				
	50% increase over 2011-12 number by 2019-20 11% increase over prior year		Double base of 3,018 students by 2019-20 1.9% increase over prior year		Increase in-state and out-of-state distance only credit hours by 10% each In-state =+21% Out-of-state =+8%		UNL	Maintain or show progress toward reaching the average six-year graduation rate of peers	2013= -4.8% 2012= -6.9%			
							UNO		2013= -0.9% 2012= 3.0%			
							UNK		2013= 1.2% 2012= 5.2%			
							UNMC	Not applicable	Not Applicable			
<b>LEGEND:</b>		 Target Met or Exceeded	 Progress Toward Target		 Target Not Met							



## University of Nebraska Strategic Dashboard Indicators (Updated as of January 29, 2016)

Federal Research Funding Growth (4.a.i) UNL and UNMC FY2013-14						Faculty Salaries (2.a.i) FY2014-15			
	<u>Campus</u>	<u>Target</u>	<u>Outcome</u>	<u>Campus</u>	<u>Target</u>	<u>Outcome</u>	<u>Campus</u>	<u>Target</u>	<u>Outcome</u>
	UNL	1.8%	-5.35%		UNMC	-0.5%		UNL	2014= -5.2% 2013= -6.2%
								UNMC	Significant progress toward exceeding midpoint of peers
								UNO	*
								UNK	*

	<u>Indicator</u>	<u>Target</u>	<u>Outcome</u>
	<b>Four-Year Graduation Guarantee (1.b.iii) AY2012-13</b>	All prospective and current undergraduate students are informed about the University's four-year graduation guarantee.	All campuses have posted information about the four-year graduation guarantee on their websites and also have a link to four-year graduation guarantee information on the UNCA website.
	<b>Faculty Salaries (2.a.1) Fall 2014</b>	Award all salary increases, to the extent possible, on the basis of merit.	Faculty salaries at UNL and UNMC may be based/granted entirely on merit, while faculty salaries at UNO and UNK are negotiated through the collective bargaining process and therefore the amount and method of distribution at UNO and UNK must be determined by agreement.
	<b>Entrepreneurship (5.d) Spring 2013</b>	<ol style="list-style-type: none"> <li>1) Increase training hours by 5%.</li> <li>2) Increase number of clients by 5%.</li> <li>3) Increase SBIR/STTR applications by 10%.</li> <li>4) Increase SBIR/STTR awards by 5%.</li> <li>5) Increase investment in NU-assisted companies by 5%.</li> <li>6) Increase NU-assisted startups and transitions by 5%.</li> </ol>	<ol style="list-style-type: none"> <li>1) Training hours increased by 3%.</li> <li>2) Clients increased by 3%.</li> <li>3) SBIR/STTR applications increased 57%.</li> <li>4) SBIR/STTR awards increased 38%.</li> <li>5) Investment in NU-assisted companies decreased 7%.</li> <li>6) NU-assisted start-ups and transitions decreased 7%.</li> </ol>

**LEGEND:**



Target Met or Exceeded









Progress Toward Target



Target Not Met

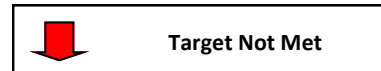
## University of Nebraska Strategic Dashboard Indicators (Updated as of January 29, 2016)

	<u>Indicator</u>	<u>Target</u>	<u>Outcome</u>
	<b>Workforce Development (3.h.i and 3.h.iii) Fall 2014</b>	Review new internal and external research on workforce needs and update categories of employment for purposes of aligning university programs to changing needs.	Faculty and state agency research has been reviewed. The University of Nebraska continues to monitor relevant faculty and agency research to identify emerging workforce opportunities and trends in the state.
	<b>Student Learning Assessment (6.g) Fall 2014</b>	<ol style="list-style-type: none"> <li>1. Review performance on standardized examinations and surveys, including the National Survey of Student Engagement and professional licensure examinations.</li> <li>2. Report on participation in pilot programs to measure student learning outcomes, such as the Collegiate Learning Assessment.</li> </ol>	<p>UNK, UNL and UNO currently participate in the National Survey of Student Engagement (NSSE). Performance on professional licensure examinations is above average for all campuses.</p> <p>Campuses are taking a variety of approaches to participation in pilot programs designed to measure learning outcomes, including exploring processes for assessing general studies requirements and past participation in the administration of the College Assessment of Academic Proficiency (CAAP).</p>
	<b>Business Process Efficiencies (6.c.ii)</b>		
	<b>Short Term Cash Investments August 2015</b>	Exceed average of similar fund types.	The 2014 return on the State's Operating Investment Pool (3.1%) exceeded the benchmark value of 2.8%.
	<b>Endowments December 2015</b>	Exceed average of similar fund types.	Fund N endowments gained 0.8% for the year ending June 30, 2015, while similar funds gained an average of 2.1% over the same period.
	<b>Debt December 2015</b>	Maintain Aa2 rating and exceed 1.15 coverage.	Bond rating maintained at Aa1 and exceeded 1.15 coverage.
	<b>Human Resources June 2015</b>	Meet midpoint of peers in faculty and staff salaries.	Faculty salaries at UNL and UNMC are below the midpoint of peers for 2014*.

**Notes:**

\*UNO and UNK salaries are governed by collective bargaining.

**LEGEND:**



TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Board of Regents agenda items related to the University of Nebraska Strategic Framework

RECOMMENDED ACTION: For Information Only

PREVIOUS ACTION: The current version of the framework appears as an information item at each Board of Regents meeting.  
  
April 2005 – The Board of Regents began development of the University of Nebraska “Strategic Framework – Accountability Measures” document.

EXPLANATION: Attached is an explanation of the agenda items that are aligned with the strategic goals of the Board of Regents’ Strategic Framework.

SPONSOR: Hank M. Bounds, President  
University of Nebraska

DATE: February 24, 2016

Alignment of the University's Strategic Goals with Board of Regents Agenda Items  
March 18, 2016

1. **The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate, and professional education.**
  - Business Affairs committee budget update presentation
  - Approve the Fund B University Program and Facilities Fees (UPFF) 2016-2017 allocation for UNL, UNK, UNMC, and UNO
  - Report of spring credit hours and enrollment summary
  - Strategic Framework annual report on need-based financial aid and merit-based scholarships
  - Strategic Framework annual report on graduation rates
  - Approve request to create a Bachelor of Science in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at UNL
2. **The University of Nebraska will build and sustain undergraduate, graduate, and professional programs of high quality with an emphasis on excellent teaching.**
  - Approve request to create a Bachelor of Science in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at UNL
  - Quarterly Personnel Report
3. **The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector, and other educational institutions.**
  - Approve request to create a Bachelor of Science in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at UNL
  - Approve sole source purchase of four patient simulators for Mobile Simulation Labs at UNMC
  - Approve sole source purchase of 3D and virtual development hardware/software, stereoscopic CADWall and 3D software at UNMC
  - Strategic Framework annual report on entrepreneurship
  - Strategic Framework annual report on workforce development
  - Strategic Framework annual report on need-based financial aid and merit-based scholarships
  - Semiannual Report on licenses
4. **The University of Nebraska will pursue excellence and regional, national, and international competitiveness in research and scholarly activity, as well as their application, focusing on areas of strategic importance and opportunity.**
  - Approve request to create a Bachelor of Science in Software Engineering in the Department of Computer Science and Engineering in the College of Engineering at UNL
  - Approve sole source purchase of 3D and virtual development hardware/software, stereoscopic CADWall and 3D software at UNMC
  - Strategic Framework annual report on research
  - Approve request to establish the Center for Patient, Family, and Community Engagement in Chronic Care Management (CCCM) in the College of Nursing at UNMC
  - Approve sole source purchase of an Ion Trap/Triple Quadrupole Mass Spectrometer at UNL
5. **The University of Nebraska will serve the entire state through strategic and effective engagement and coordination with citizens, businesses, agriculture, other educational institutions, and rural and urban communities and regions.**
  - Approve sole source purchase of four patient simulators for Mobile Simulation Labs at UNMC
  - Strategic Framework annual report on entrepreneurship

**6. The University of Nebraska will be cost effective and accountable to the citizens of the state.**

- Approve sole source purchase of an Ion Trap/Triple Quadrupole Mass Spectrometer at UNL
- Business Affairs committee budget update presentation
- Approve purchase of network infrastructure equipment at UNMC
- Approve or accept various regular reports including:
  - Quarterly status of capital construction projects
  - Status report of six-year capital plan
  - Quarterly report of gifts, grants, and contracts
  - Report on bids and contracts
  - Semi-annual report on licenses
  - Annual fire and safety report
- Report on members of the University of Nebraska project review board pool
- Business Affairs committee approval of intermediate design reports

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Amend Section 2.11 of the *Bylaws of the Board of Regents of the University of Nebraska*

RECOMMENDED ACTION: None. This item is presented for information only and will be brought back to the Board for approval at its next meeting.

PREVIOUS ACTION: January 20, 2006 – The Board of Regents approved amendments to Section 2.11 of the *Bylaws*.  
August 20, 1973 – Section 2.11 of the *Bylaws* was originally adopted.

EXPLANATION: Section 2.11 of the *Bylaws of the Board of Regents of the University of Nebraska* provides that the President will conduct periodic reviews of all “Multi-Departmental Academic Centers for Research, Teaching and/or Service” on a timetable appropriate to the nature of the center but not less frequently than every five years, and report the results of periodic reviews to the Board of Regents.

Centers are typically evaluated in conjunction with mandated college/department academic program reviews (APR). These APRs are typically conducted on a six to seven-year cycle; the proposed change will allow reporting schedule synchronization, use reviewer resources more efficiently, and more closely align policy with practice.

It is proposed that the text of Section 2.11 be amended as follows:

**2.11 Multi-Departmental Academic Centers for Research, Teaching, and/or Service**

The President will conduct periodic reviews of all “Multi-Departmental Academic Centers for Research, Teaching, and/or Service,” on a timetable appropriate to the nature of the center but not less frequently than every ~~five~~ seven years, and report the results of periodic reviews to the Board of Regents.

The revision to Section 2.11 has been reviewed by the Council of Academic Officers. This revision also has been reported to the Academic Affairs Committee.

SPONSOR: Susan. M. Fritz  
Executive Vice President and Provost

RECOMMENDED: Hank M. Bounds, President  
University of Nebraska

DATE: February 26, 2016

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Personnel Reports

RECOMMENDED ACTION: Report

PREVIOUS ACTION: On December 10, 1994, the Board of Regents amended Section 3.2 of the *Bylaws of the Board of Regents* to delegate to the President, or administrative officers designated by the President, authority to make appointments in the Academic-Administrative staff to faculty positions and to administrative positions below the rank of Dean and equivalent ranks. Executive Memorandum No. 13 subsequently delegated authority to the Chancellors to make Academic-Administrative appointments below the level of Dean. Such appointments at the rank of assistant professor or above are required by the *Bylaws of the Board of Regents* to be reported to the Board after each quarter and maintained on file as a public record in the Office of the Corporation Secretary.

EXPLANATION: A series of reports of campus personnel actions approved by each Chancellor during the 4<sup>th</sup> quarter of 2015 is attached.

PROJECT COST: None

SOURCE OF FUNDS: None

APPROVED: Susan M. Fritz  
Executive Vice President and Provost

DATE: February 24, 2016

**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA-LINCOLN**

**NEW APPOINTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Ransone, John	Athletics	Director, Nebraska Athletic Performance Laboratory	Special	10/1/2015		120,000 FY	1.00
Weller, Susan	University Museum	Director	Special	10/1/2015		185,000 FY	1.00



**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA-LINCOLN IANR**

**NEW APPOINTMENTS**

<b><u>NAME</u></b>	<b><u>UNIT</u></b>	<b><u>TITLE</u></b>	<b><u>APPT TYPE</u></b>	<b><u>BEGIN DATE</u></b>	<b><u>END DATE</u></b>	<b><u>SALARY</u></b>	<b><u>FTE</u></b>
Chen, Jiajia	Biological Systems Engineering	Research Assistant Professor	Special	11/1/2015		50,000 FY	1.00
Fenton, Melissa	4-H Youth and Development	Assistant Extension Educator	Special	12/23/2015		45,550 FY	1.00
Gilmore, Troy	School of Natural Resources	Assistant Professor	Specific Term	10/1/2015		81,000 FY	1.00
VanWormer, Elizabeth	Veterinary and Biomedical Sciences	Assistant Professor of Practice	Special	11/1/2015	10/31/2016	78,000 FY	1.00
Wu-Smart, Judy	Entomology	Assistant Professor	Specific Term	10/1/2015		80,000 FY	1.00

**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**NEW APPOINTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Drake, Mary	Radiology	Assistant Professor	Special	12/15/2015		22,500	FY 0.50
Duan, Bin	Internal Medicine	Assistant Professor	Health Prof	11/15/2015	6/30/2019	85,000	FY 1.00
Fisher, Marisa	Pediatrics	Assistant Professor	Health Prof	10/19/2015	6/30/2017	40,000	FY 1.00
Gurumurthy, Channabasavaiah	Munroe-Meyer Institute	Assistant Professor	Health Prof	11/1/2015	6/30/2017	96,065	FY 1.00
Hickman, Jennifer	Pharmacy Practice	Clinical Assistant Professor	Special	12/1/2015		105,000	FY 1.00
Hwang, Soonjo	Psychiatry	Assistant Professor	Special	12/1/2015		123,550	FY 1.00
Jiang, Peng	Munroe-Meyer Institute	Assistant Professor	Health Prof	11/23/2015	6/30/2018	85,000	FY 1.00
Jones, Andrea	Family Medicine	Assistant Professor	Health Prof	11/15/2015	6/30/2017	50,000	FY 1.00
Kaur, Sukhwinder	Biochemistry and Molecular Biology	Assistant Professor	Special	10/1/2015		57,631	FY 1.00
Kennel, Victoria	College of Allied Health	Assistant Professor	Health Prof	11/2/2015	6/30/2017	80,000	FY 1.00
Lockhart, Thomas	Anesthesiology	Assistant Professor	Health Prof	10/1/2015	6/30/2016	45,000	FY 1.00
Murry, Daryl	Pharmacy Practice	Associate Professor	Continuous	11/3/2015		130,000	FY 1.00
Nasser, Mohd	Biochemistry and Molecular Biology	Assistant Professor	Special	12/1/2015		56,000	FY 1.00
Patterson, Andrew	Anesthesiology	Professor	Special	10/1/2015		185,000	FY 1.00
Sumegi, Janos	Pathology and Microbiology	Professor	Special	10/19/2015		55,000	FY1 0.50
Thompson, Rachel	Internal Medicine	Associate Professor	Special	12/28/2015	1/14/2016	25,000	FY 0.50

**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**NEW APPOINTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Wiley, Michael	Environmental, Agricultural and Occupational Health	Research Assistant Professor	Special	10/1/2015		90,000	FY 1.00
Yalof, Jennifer	Psychiatry	Assistant Professor	Special	12/9/2015		80,000	FY 1.00

**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA ADMINISTRATION**

**NEW APPOINTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Gonnerman, Laura	Vice President and General Counsel	Associate General Counsel	Special	11/9/2015		100,900 FY	1.00

**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA-LINCOLN**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Barlow, Steven	Center for Brain, Biology and Behavior	Associate Director (Stipend)	Special	10/1/2015	9/30/2016	15,000 FY	0.00
		N/A	N/A			0 FY	0.00
	Special Education and Communication Disorders	Professor	Continuous			234,000 FY	1.00
		Professor	Continuous			234,000 FY	1.00
Renaud, Jerry	Broadcasting	Professor	Continuous			90,403 AY	1.00
		Professor	Continuous			90,403 AY	1.00
	College of Journalism and Mass Communications	N/A	N/A	10/1/2015		0 AY	0.00
		Journalism Sequence Head	Special		9/30/2015	5,000 AY	0.00
Sayood, Khalid	Electrical and Computer Engineering	Professor	Continuous			158,937 AY	1.00
		Professor	Continuous			158,937 AY	1.00
	Omar Heins College Professorship	Special	10/1/2015	9/30/2016	10,000 AY	0.00	
		Special		9/30/2015	10,000 AY	0.00	
Unlu, Emre	Finance	Associate Professor	Continuous			216,983 AY	1.00
		Associate Professor	Continuous			216,983 AY	1.00
	Economics	Paul C. Burmeister Professorship	Special	11/1/2015	10/31/2020	10,000 AY	0.00
		N/A	N/A			0 AY	0.00

*Shaded reflects new or ongoing appointment*  
*Un-shaded reflects old appointment*

**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA-LINCOLN IANR**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Adams, Don	Agricultural Research and Development Center	Director (Includes stipend)	Special	11/1/2015	6/30/2017	202,900 FY	1.00
	West Central Research and Extension Center	Director (Includes stipend)	Special		10/31/2015	184,454 FY	1.00
Bruns, Kelly	West Central Research and Extension Center	Interim Director (Includes stipend)	Special	11/1/2015	6/30/2016	135,742 FY	1.00
		Associate Director (Includes stipend)	Special		10/31/2015	129,278 FY	1.00
Burda, Megan	Southeast Research and Extension Center	Assistant Extension Educator	Special	10/1/2015		46,500 FY	1.00
		Managerial/Professional	Other		9/30/2015	36,068 FY	1.00
Fisk, Connie	Southeast Research and Extension Center	Assistant Extension Educator	Special	10/1/2015		60,022 FY	1.00
		Assistant Extension Educator	Special		9/30/2015	30,011 FY	0.50
	Nebraska College of Technical Agriculture	N/A	N/A	10/1/2015		0 FY	0.00
Hyten, Jr., David	Agronomy and Horticulture	Associate Professor	Continuous			105,000 AY	1.00
		Associate Professor	Continuous			105,000 AY	1.00
		Haskins College Professorship	Special	12/1/2015	11/30/2020	10,000 AY	0.00
		N/A	N/A			0 AY	0.00
Sanchez Rodriguez, Robersy	Agronomy and Horticulture	Research Assistant Professor	Special	12/1/2015	11/30/2016	66,625 FY	1.00
		Research Assistant Professor	Special		11/30/2015	66,625 FY	1.00

*Shaded reflects new or ongoing appointment*

*Un-shaded reflects old appointment*

**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
<sup>1</sup> Auxier, Joseph	Internal Medicine	Assistant Professor	Health Prof	12/1/2015	6/30/2017	25,000 FY	0.63
		Assistant Professor	Health Prof		11/30/2015	40,000 FY	1.00
Beck, Gary	Pediatrics	Assistant Professor	Special			7,876 FY	0.10
		Assistant Professor	Special			7,876 FY	0.10
	College of Medicine	Director, Curriculum Development	Special			70,890 FY	0.90
		Director, Curriculum Development	Special			70,890 FY	0.90
		Assistant Dean, Medical Education (Stipend)	Special	10/1/2015		11,815 FY	0.00
		N/A	N/A			0 FY	0.00
		Professor	Continuous			61,544 FY	0.40
		Professor	Continuous			61,544 FY	0.40
Berger, Ann Malone	College of Nursing-Omaha Division	Dorothy Hodges Olson Chair in Nursing	Special			92,318 FY	0.60
		Dorothy Hodges Olson Chair in Nursing	Special			92,318 FY	0.60
		N/A	N/A	11/1/2015		0 FY	0.00
		Director, Doctoral Programs (Stipend)	Special		10/31/2015	3,000 FY	0.00
		Associate Dean (Stipend)	Special			5,000 FY	0.00
		Associate Dean (Stipend)	Special			5,000 FY	0.00

<sup>1</sup> Remaining salary defrayed by VA Nebraska-Western Iowa Health Care System

*Shaded reflects new or ongoing appointment*

*Un-shaded reflects old appointment*

**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
<sup>2</sup> Casey, Carol	Internal Medicine	Professor	Health Prof	10/1/2015	6/30/2016	19,928 FY	0.15
		Professor	Health Prof		9/30/2015	41,182 FY	0.31
Chapman, Nora	Pathology and Microbiology	Professor	Special	10/1/2015		95,901 FY	0.80
		Professor	Continuous		9/30/2015	119,876 FY	1.00
Esposito, Paul	Orthopedic Surgery	Professor	Continuous			123,908 FY	1.00
		Professor	Continuous			123,908 FY	1.00
		Ronald W. Schaefer Endowed Chair of Pediatric Orthopedic Surgery	Special	11/1/2015	10/30/2020	0 FY	0.00
		N/A	N/A			0 FY	0.00
Goranthla, Santhi	Pharmacology and Experimental Neuroscience	Associate Professor	Health Prof	11/30/2015	6/30/2017	50,000 FY	1.00
		Associate Professor	Special		11/29/2015	69,422 FY	1.00
		Director, Development and Allocation of Humanized Mouse Research Resources (Stipend)	Special			20,000 FY	0.00
		Director, Development and Allocation of Humanized Mouse Research Resources (Stipend)	Special			20,000 FY	0.00
		Research Scientist (Stipend)	Special	11/30/2015		19,422 FY	0.00
		N/A	N/A			0 FY	0.00

<sup>2</sup> Remaining salary defrayed by VA Nebraska-Western Iowa Health Care System

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**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Guda, Chittibabu	Genetics, Cell Biology and Anatomy	Associate Professor	Continuous			177,151 FY	1.00
		Associate Professor	Continuous			177,151 FY	1.00
		Director, Bioinformatics and Systems Biology (Stipend)	Special			50,000 FY	0.00
		Director, Bioinformatics and Systems Biology (Stipend)	Special			50,000 FY	0.00
	Vice Chancellor for Research	Chief, Bioinformatics and Research Computing Officer (Stipend)	Special	11/1/2015		35,000 FY	0.00
		N/A	N/A			0 FY	0.00
Hanna, Kathleen	College of Nursing-Omaha Division	Professor	Continuous			151,525 FY	1.00
		Professor	Continuous			151,525 FY	1.00
		Carol M. Wilson Endowed Chair in Nursing (Stipend)	Special			5,000 FY	0.00
		Carol M. Wilson Endowed Chair in Nursing (Stipend)	Special			5,000 FY	0.00
	Director, Ph.D. Program (Stipend)	Director, Ph.D. Program (Stipend)	Special	11/1/2015		3,000 FY	0.00
		N/A	N/A			0 FY	0.00

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**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
<sup>3</sup> Haynatzki, Gleb	Biostatistics	Professor	Continuous	12/1/2015		131,041 FY	1.00
		Professor	Continuous		11/30/2015	128,501 FY	1.00
<sup>4</sup> Karst, Gregory	Physical Therapy Education	Professor	Continuous			113,070 FY	1.00
		Professor	Continuous			113,070 FY	1.00
	College of Allied Health Professions	Executive Associate Dean (Stipend)	Special	8/6/2015		19,311 FY	0.00
		Assistant Dean for Academic Affairs (Stipend)	Special		8/5/2015	16,811 FY	0.00
Krobot, Charles	Pharmacy Practice	Assistant Professor	Special	11/1/2015		88,794 FY	0.75
		Assistant Professor	Special		10/31/2015	59,196 FY	0.50
	N/A	Interim Chairperson (Stipend)	Special	11/1/2015		20,000 FY	0.00
		N/A	N/A			0 FY	0.00
<sup>5</sup> McVicker, Benita	Internal Medicine	Associate Professor	Health Prof	11/1/2015		18,721 FY	0.26
		Associate Professor	Health Prof		10/31/2015	36,002 FY	0.50

<sup>3</sup> Equity increase

<sup>4</sup> Delay in reporting due to department not finalizing until after 3rd quarterly report was submitted

<sup>5</sup> Remaining salary defrayed by VA Nebraska-Western Iowa Health Care System

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*Un-shaded reflects old appointment*

**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA MEDICAL CENTER**

<u>NAME</u>	<u>UNIT</u>	<u>ADJUSTMENTS</u>		<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>	
		<u>TITLE</u>	<u>APPT TYPE</u>					
Michael, Kimberly	Munroe-Meyer Institute	Associate Professor	Continuous	12/1/2015		18,857 FY	0.20	
		Associate Professor	Continuous		11/30/2015	47,345 FY	0.50	
	Munroe-Meyer Institute	Program Director, Diagnostic Medical	Special			46,940 FY	0.50	
		Program Director, Diagnostic Medical	Special			46,940 FY	0.50	
	Academic Affairs	Associate Director, Interprofessional	Special	12/1/2015	11/30/2018	33,286 FY	0.30	
		N/A	N/A			0 FY	0.00	
Patterson, Andrew	Anesthesiology	Professor	Special			185,000 FY	1.00	
		Professor	Special			185,000 FY	1.00	
	Academic Affairs	Associate Director, Interprofessional Academy of Educators (Stipend)	Special	12/1/2015	11/30/2017	5,000 FY	0.00	
		N/A	N/A			0 FY	0.00	
	Paulman, Paul	Family Medicine	Professor	Continuous			139,273 FY	0.74
			Professor	Continuous			139,273 FY	0.74
College of Medicine		Associate Dean, Clinical Skills and Quality (Includes stipend)	Special	11/1/2015		53,166 FY	0.26	
		Assistant Dean, Clinical Skills and Quality (Includes stipend)	Special		10/31/2015	53,166 FY	0.26	

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**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

<u>NAME</u>	<u>UNIT</u>	<u>ADJUSTMENTS</u>			<u>SALARY</u>	<u>FTE</u>
		<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>		
Poluektova, Larisa	Pharmacology and Experimental Neuroscience	Professor	Health Prof	11/30/2015	6/30/2017	55,000 FY 1.00
		Professor	Special		11/29/2015	87,834 FY 1.00
		Research Scientist	Special	11/30/2015		32,834 FY 0.00
		N/A	N/A			0 FY 0.00
		Director, Humanized Mouse Development Program (Stipend)	Special			20,000 FY 0.00
		Director, Humanized Mouse Development Program (Stipend)	Special			20,000 FY 0.00
Rennard, Stephen	Internal Medicine	Professor	Special	10/2/2015		41,935 FY 0.23
		Professor	Continuous		10/1/2015	165,962 FY 0.89
		Margaret A. Larson Professorship of Respiratory Diseases	Special	10/2/2015		0 FY 0.00
		Margaret A. Larson Professorship of Respiratory Diseases	Special		10/1/2015	20,414 FY 0.11
Rogan, Eleanor	Environmental, Agricultural, and Occupational Health	Professor	Continuous			156,285 FY 1.00
		Professor	Continuous			156,285 FY 1.00
		Chairperson (Stipend)	Special			5,000 FY 0.00
		Chairperson (Stipend)	Special			5,000 FY 0.00
	College of Public Health	N/A	N/A	12/31/2015		0 FY 0.00
		Associate Dean for Research (Stipend)	Special		12/30/2015	10,000 FY 0.00

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*Un-shaded reflects old*

**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Sanderson, Sam	Pharmaceutical Sciences	Research Associate Professor	Special	12/1/2015		1,842 FY	0.02
		Research Associate Professor	Special		11/30/2015	9,216 FY	0.10
Schopfer, Lawrence	Eppley Institute	Research Assistant Professor	Special	10/21/2015		6,694 FY	0.10
		Research Assistant Professor	Special		10/20/2015	66,939 FY	1.00
Sears, Thomas	Internal Medicine	Associate Professor	Special	10/1/2015		58,851 FY	0.50
		Associate Professor	Special		9/30/2015	94,162 FY	0.80
Stuberg, Wayne	Physical Therapy	Professor	Continuous			199,086 FY	1.00
		Professor	Continuous			199,086 FY	1.00
		Discipline Director	Special			0 FY	0.00
		Discipline Director	Special			0 FY	0.00
	Munroe Meyer Institute	Interim Director (Stipend)	Special	10/1/2015		10,000 FY	0.00
		N/A	N/A			0 FY	0.00
		Associate Director	Special			0 FY	0.00
		Associate Director	Special			0 FY	0.00

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*Un-shaded reflects old appointment*

**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Talmon, Geoffrey	Pathology and Microbiology	Associate Professor	Health Prof			94,057 FY	1.00
		Associate Professor	Health Prof			94,057 FY	1.00
		Linder Pathology Residency Director	Special			0 FY	0.00
		Distinguished Chair					
	Academic Affairs	Linder Pathology Residency Director	Special			0 FY	0.00
		Distinguished Chair					
		Director, Interprofessional Academy of Educators (Stipend)	Special	12/1/2015		10,000 FY	0.00
		N/A	N/A			0 FY	0.00
Thorell, William	Surgery	Associate Professor	Health Prof			84,792 FY	1.00
		Associate Professor	Health Prof			84,792 FY	1.00
	Neurosurgery	Lyal G. Leibrock, M.D., Chair in	Special	10/1/2015	9/30/2020	0 FY	0.00
		N/A	N/A			0 FY	0.00
<sup>6,7</sup> Thompkins, Janice	Clinical Laboratory Science	Assistant Professor	Special			26,664 FY	0.30
		Assistant Professor	Special			26,664 FY	0.30
	College of Allied Health Professions	Director, Academic and Student Affairs (Includes stipend)	Special	8/6/2015		73,237 FY	0.70
		Director, Academic and Student Affairs (Includes stipend)	Special		8/5/2015	68,250 FY	0.70

<sup>6</sup> Delay in reporting due to department not finalizing until after 3rd quarterly report submitted

<sup>7</sup> Stipend increase for additional responsibilities

*Shaded reflects new or ongoing appointment*

*Un-shaded reflects old appointment*

**PERSONNEL REPORT  
10/01/2015 - 12/31/2015  
UNIVERSITY OF NEBRASKA MEDICAL CENTER**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Tracy, Steven	Pathology and Microbiology	Professor	Special	10/1/2015		106,030 FY	0.80
		Professor	Continuous		9/30/2015	132,538 FY	1.00
<sup>8</sup> Volkman, Kathleen	Physical Therapy Education	Assistant Professor	Health Prof			86,729 FY	1.00
		Assistant Professor	Health Prof			86,729 FY	1.00
		Associate Director (Stipend)	Special	8/6/2015		3,500 FY	0.00
		N/A	N/A			0 FY	0.00
West, William	Pathology and Microbiology	Associate Professor	Special	12/1/2015		64,723 FY	0.50
		Associate Professor	Continuous		11/30/2015	129,447 FY	1.00
Wheelock, Lisa	Radiology	Assistant Professor	Special	11/1/2015		27,560 FY	0.65
		Assistant Professor	Special		10/31/2015	31,810 FY	0.75
White, Lisa	Pediatrics	Assistant Professor	Special	11/1/2015		40,143 FY	1.00
		Assistant Professor	Special		10/31/2015	28,100 FY	0.70

<sup>8</sup> Delay in reporting due to department not finalizing until after 3rd quarterly report submitted

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**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA AT OMAHA**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
Allen, Joseph	Psychology	Assistant Professor	Specific			60,608 AY	1.00
		Assistant Professor	Specific			60,608 AY	1.00
		Director, Volunteer Program Assessment (Stipend)	Special	11/1/2015	5/13/2016	8,000 AY	0.00
		N/A				N/A AY	0.00
<sup>9</sup> Myers, Sara	School of Health, Physical Education and Recreation	Assistant Professor	Specific			72,000 AY	1.00
		Assistant Professor	Specific			72,000 AY	1.00
		Coordinator (Stipend)	Special	10/1/2015		5,645 AY	0.00
		Coordinator (Stipend)	Special		9/30/2015	12,497 AY	0.00

<sup>9</sup> Decrease in grant funding availability

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*Un-shaded reflects old appointment*



**PERSONNEL REPORT**  
**10/01/2015 - 12/31/2015**  
**UNIVERSITY OF NEBRASKA ADMINISTRATION**

**ADJUSTMENTS**

<u>NAME</u>	<u>UNIT</u>	<u>TITLE</u>	<u>APPT TYPE</u>	<u>BEGIN DATE</u>	<u>END DATE</u>	<u>SALARY</u>	<u>FTE</u>
10 Basye, Alison	Vice President and General Counsel	Associate General Counsel	Special	10/1/2015		95,750 FY	0.80
		Associate General Counsel	Special		9/30/2015	92,250 FY	0.80
11 Yates, Kristin	Executive Vice President and Provost	Assistant Vice President and Director of Institutional Research	Special	10/1/2015		130,018 FY	1.00
		Assistant Vice President and Director of Institutional Research	Special		9/30/2015	112,018 FY	1.00

<sup>10</sup> Performance adjustment

<sup>11</sup> External market adjustment

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TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Spring 2016 Enrollment Report

RECOMMENDED ACTION: Report

PREVIOUS ACTION: April 10, 2015– The Board accepted the spring 2014 enrollment report

EXPLANATION: Attached is the spring 2016 enrollment report including comparisons to spring 2015. NU-wide highlights are reported below and individual campus data can be obtained in the full report.

Total headcount enrollment of 48,412 represented an increase of 1.0% over spring 2015. Undergraduate headcount enrollment (35,732) increased by 0.7% over the previous year and graduate enrollment (9,466) by 0.8%. Professional enrollment (2,842) increased by 2.8%.

Total nonresident enrollment increased by 4.2% from spring 2015 to spring 2016, while total resident enrollment decreased by -0.2%. Spring 2016 total nonresident enrollment was 11,507, while resident enrollment was 36,533. Increases in enrollment were reported in the areas of nonresident undergraduate (5.3%) and graduate (2.7%) enrollment. Resident undergraduate enrollment declined slightly (-0.4%).

Full-time equivalent (FTE) enrollment for the spring 2015 to spring 2016 reporting period increased by 0.3% overall, rising from 40,235 in 2015 to 40,368 in 2016. Undergraduate FTE increased by 0.3%. Professional student FTE increased by 2.1%. Undergraduate FTE for spring 2016 was 32,260; graduate FTE, 5,475; and professional FTE 2,635. Total Semester Credit Hours (SCH) increased at a rate similar to headcount. The total SCH change from spring 2015 to 2016 was 0.8% (or an increase from 563,180 to 567,453 SCH).

SPONSOR: Kristin E. Yates  
Assistant Vice President and Director of Institutional Research

RECOMMENDED: Susan M. Fritz  
Executive Vice President and Provost

DATE: March 17, 2016

UNIVERSITY OF NEBRASKA  
SUMMARY - HEADCOUNT ENROLLMENT REPORT  
SPRING SEMESTER 2016

	Administrative Site			
	Spring 2016	Spring 2015	Difference	% Change
<b>UNIVERSITY OF NEBRASKA - LINCOLN</b>				
<b>Undergraduate</b>				
Agricultural Sciences & Natural Resources	2,123	2,110	13	0.6%
Architecture	371	364	7	1.9%
Arts & Sciences	3,882	4,328	(446)	-10.3%
Business Administration	3,505	3,355	150	4.5%
Education and Human Sciences	2,759	2,865	(106)	-3.7%
Engineering	2,780	2,801	(21)	-0.7%
Fine & Performing Arts	609	612	(3)	-0.5%
Journalism & Mass Communications	1,045	1,002	43	4.3%
Explore Center Undergraduates	1,578	869	709	81.6%
Visiting	121	133	(12)	-9.0%
<b>First-Time Freshmen</b>	<b>132</b>	<b>129</b>	<b>3</b>	<b>2.3%</b>
<b>Undergraduate Subtotal</b>	<b>18,773</b>	<b>18,439</b>	<b>334</b>	<b>1.8%</b>
<b>Graduate</b>	<b>4,470</b>	<b>4,390</b>	<b>80</b>	<b>1.8%</b>
<b>Professional</b>				
Architecture	74	58	16	27.6%
Education and Human Sciences	23	14	9	64.3%
Law	329	362	(33)	-9.1%
Plant Health	7	8	(1)	-12.5%
Veterinary Medicine	51	50	1	2.0%
<b>Professional Subtotal</b>	<b>484</b>	<b>492</b>	<b>(8)</b>	<b>-1.6%</b>
<b>UNL TOTAL</b>	<b>23,727</b>	<b>23,321</b>	<b>406</b>	<b>1.7%</b>
<b>UNIVERSITY OF NEBRASKA MEDICAL CENTER</b>				
<b>Undergraduate</b>				
Dentistry (Dental Hygiene)	47	47	0	0.0%
Medicine (Allied Health)	112	108	4	3.7%
Nursing	666	660	6	0.9%
Unclassified	22	20	2	10.0%
<b>Undergraduate Subtotal</b>	<b>847</b>	<b>835</b>	<b>12</b>	<b>1.4%</b>
<b>Graduate</b>	<b>458</b>	<b>466</b>	<b>(8)</b>	<b>-1.7%</b>
<b>Professional</b>				
Allied Health	388	364	24	6.6%
Nursing Practitioner	19	20	(1)	-5.0%
Nursing Practice (DNP)	50	23	27	117.4%
Nursing MSN	251	263	(12)	-4.6%
Radiology Oncology Physics	2	2	0	0.0%
Public Health	178	158	20	12.7%
Pharmacy	250	241	9	3.7%
Dentistry	203	209	(6)	-2.9%
Medicine (M.D.)	500	501	(1)	-0.2%
Medicine (Post M.D.)	517	492	25	5.1%
<b>Professional Subtotal</b>	<b>2,358</b>	<b>2,273</b>	<b>85</b>	<b>3.7%</b>
<b>UNMC TOTAL</b>	<b>3,663</b>	<b>3,574</b>	<b>89</b>	<b>2.5%</b>
<b>UNIVERSITY OF NEBRASKA AT OMAHA</b>				
<b>Undergraduate</b>				
Arts & Sciences	3,214	3,277	(63)	-1.9%
Business Administration	1,906	1,867	39	2.1%
Communication, Fine Arts and Media	935	929	6	0.6%
Education	1,339	1,345	(6)	-0.4%
Information Science & Technology	854	772	82	10.6%
CPACS	1,247	1,149	98	8.5%
Continuing Studies	1,174	1,217	(43)	-3.5%
Non-Degree	303	309	(6)	-1.9%
University Division	570	584	(14)	-2.4%
<b>First-Time Freshmen</b>	<b>66</b>	<b>98</b>	<b>(32)</b>	<b>-32.7%</b>
<b>Undergraduate Subtotal</b>	<b>11,542</b>	<b>11,449</b>	<b>93</b>	<b>0.8%</b>
<b>Graduate</b>	<b>2,903</b>	<b>2,882</b>	<b>21</b>	<b>0.7%</b>
<b>UNO TOTAL</b>	<b>14,445</b>	<b>14,331</b>	<b>114</b>	<b>0.8%</b>
<b>UNIVERSITY OF NEBRASKA AT KEARNEY</b>				
<b>Undergraduate</b>				
Business & Technology	1,147	1,181	(34)	-2.9%
Education	1,065	1,134	(69)	-6.1%
Fine Arts & Humanities	533	572	(39)	-6.8%
Natural & Social Sciences	1,152	1,229	(77)	-6.3%
University College	571	548	23	4.2%
Non-Degree	102	110	(8)	-7.3%
<b>First-Time Freshmen</b>	<b>30</b>	<b>28</b>	<b>2</b>	<b>7.1%</b>
<b>Undergraduate Subtotal</b>	<b>4,570</b>	<b>4,774</b>	<b>(204)</b>	<b>-4.3%</b>
<b>Graduate</b>	<b>1,635</b>	<b>1,657</b>	<b>(22)</b>	<b>-1.3%</b>
<b>UNK TOTAL</b>	<b>6,205</b>	<b>6,431</b>	<b>(226)</b>	<b>-3.5%</b>
<b>UNIVERSITY OF NEBRASKA UNDERGRADUATE</b>	<b>35,732</b>	<b>35,497</b>	<b>235</b>	<b>0.7%</b>
<b>FIRST-TIME FRESHMEN TOTAL</b>	<b>228</b>	<b>255</b>	<b>(27)</b>	<b>-10.6%</b>
<b>UNIVERSITY OF NEBRASKA GRADUATE</b>	<b>9,466</b>	<b>9,395</b>	<b>71</b>	<b>0.8%</b>
<b>UNIVERSITY OF NEBRASKA PROFESSIONAL</b>	<b>2,842</b>	<b>2,765</b>	<b>77</b>	<b>2.8%</b>
<b>UNIVERSITY OF NEBRASKA TOTAL</b>	<b>48,040</b>	<b>47,657</b>	<b>383</b>	<b>0.8%</b>
<b>Nebraska College of Technical Agriculture (NCTA)</b>	<b>372</b>	<b>294</b>	<b>78</b>	<b>26.5%</b>
<b>UNIVERSITY OF NEBRASKA TOTAL (with NCTA)</b>	<b>48,412</b>	<b>47,951</b>	<b>461</b>	<b>1.0%</b>

Source: UNL, UNO, UNK, UNMC Office of Institutional Research

**UNIVERSITY OF NEBRASKA  
FULL-TIME & PART-TIME ENROLLMENT BY LEVEL  
SPRING SEMESTER 2016**

	Spring 2016		Spring 2015		Percent Change	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
<b>UNL</b>						
Undergraduate	17,298	1,475	17,041	1,398	1.5%	5.5%
Graduate	2,058	2,412	2,036	2,354	1.1%	2.5%
Professional	411	73	440	52	-6.6%	40.4%
<b>Total</b>	<b>19,767</b>	<b>3,960</b>	<b>19,517</b>	<b>3,804</b>	<b>1.3%</b>	<b>4.1%</b>
<hr/>						
	Spring 2016		Spring 2015		Percent Change	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
<b>UNMC</b>						
Undergraduate	657	190	679	156	-3.2%	21.8%
Graduate	371	87	375	91	-1.1%	-4.4%
Professional	2,121	237	2,050	223	3.5%	6.3%
<b>Total</b>	<b>3,149</b>	<b>514</b>	<b>3,104</b>	<b>470</b>	<b>1.4%</b>	<b>9.4%</b>
<hr/>						
	Spring 2016		Spring 2015		Percent Change	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
<b>UNO</b>						
Undergraduate	8,644	2,898	8,625	2,824	0.2%	2.6%
Graduate	836	2,067	881	2,001	-5.1%	3.3%
Professional						
<b>Total</b>	<b>9,480</b>	<b>4,965</b>	<b>9,506</b>	<b>4,825</b>	<b>-0.3%</b>	<b>2.9%</b>
<hr/>						
	Spring 2016		Spring 2015		Percent Change	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
<b>UNK</b>						
Undergraduate	3,925	645	4,165	609	-5.8%	5.9%
Graduate	212	1,423	232	1,425	-8.6%	-0.1%
Professional						
<b>Total</b>	<b>4,137</b>	<b>2,068</b>	<b>4,397</b>	<b>2,034</b>	<b>-5.9%</b>	<b>1.7%</b>
<hr/>						
	Spring 2016		Spring 2015		Percent Change	
	Full-Time	Part-Time	Full-Time	Part-Time	Full-Time	Part-Time
<b>University of Nebraska Total</b>						
Undergraduate	30,524	5,208	30,510	4,987	0.0%	4.4%
Graduate	3,477	5,989	3,524	5,871	-1.3%	2.0%
Professional	2,532	310	2,490	275	1.7%	12.7%
<b>Total</b>	<b>36,533</b>	<b>11,507</b>	<b>36,524</b>	<b>11,133</b>	<b>0.0%</b>	<b>3.4%</b>

Source: UNL, UNO, UNK, UNMC Office of Institutional Research

**UNIVERSITY OF NEBRASKA  
SUMMARY - FULL-TIME EQUIVALENT ENROLLMENT REPORT  
SPRING SEMESTER 2016**

<b>UNL</b>				
	<b>Spring 2016</b>	<b>Spring 2015</b>	<b>Difference</b>	<b>% Change</b>
Undergraduate	17,790	17,507	283	1.6%
Graduate	2,862	2,821	41	1.5%
Professional	435	457	(22)	-4.9%
<b>Total</b>	<b>21,087</b>	<b>20,785</b>	<b>302</b>	<b>1.5%</b>
<b>UNMC</b>				
	<b>Spring 2016</b>	<b>Spring 2015</b>	<b>Difference</b>	<b>% Change</b>
Undergraduate	720	731	(11)	-1.5%
Graduate	400	405	(5)	-1.3%
Professional	2,200	2,124	76	3.6%
<b>Total</b>	<b>3,320</b>	<b>3,261</b>	<b>59</b>	<b>1.8%</b>
<b>UNO</b>				
	<b>Spring 2016</b>	<b>Spring 2015</b>	<b>Difference</b>	<b>% Change</b>
Undergraduate	9,610	9,566	44	0.5%
Graduate	1,525	1,548	(23)	-1.5%
Professional				
<b>Total</b>	<b>11,135</b>	<b>11,114</b>	<b>21</b>	<b>0.2%</b>
<b>UNK</b>				
	<b>Spring 2016</b>	<b>Spring 2015</b>	<b>Difference</b>	<b>% Change</b>
Undergraduate	4,140	4,368	(228)	-5.2%
Graduate	686	707	(21)	-3.0%
Professional				
<b>Total</b>	<b>4,826</b>	<b>5,075</b>	<b>(249)</b>	<b>-4.9%</b>
<b>University of Nebraska Total</b>				
	<b>Spring 2016</b>	<b>Spring 2015</b>	<b>Difference</b>	<b>% Change</b>
Undergraduate	32,260	32,172	88	0.3%
Graduate	5,473	5,481	(8)	-0.1%
Professional	2,635	2,582	53	2.1%
<b>Total</b>	<b>40,368</b>	<b>40,235</b>	<b>133</b>	<b>0.3%</b>

Source: UNL, UNO, UNK, UNMC Office of Institutional Research

\* Does not include NCTA

Note: Full-time equivalent (FTE) is defined as full-time plus one third part-time headcount.

**UNIVERSITY OF NEBRASKA  
HEADCOUNT ENROLLMENT BY RESIDENCY STATUS BY LEVEL  
SPRING SEMESTER 2016**

	Resident Enrollment (a)			Nonresident Enrollment (a)			Total		
	2016	2015	% Change	2016	2015	% Change	2016	2015	% Change
<b>UNIVERSITY OF NEBRASKA - LINCOLN</b>									
Undergraduate	14,121	14,135	-0.1%	4,652	4,304	8.1%	18,773	18,439	1.8%
First-Time Freshmen	38	23	65.2%	94	106	-11.3%	132	129	2.3%
Graduate	1,911	1,924	-0.7%	2,559	2,466	3.8%	4,470	4,390	1.8%
Professional	360	359	0.3%	124	133	-6.8%	484	492	-1.6%
<b>UNL TOTAL</b>	<b>16,392</b>	<b>16,418</b>	<b>-0.2%</b>	<b>7,335</b>	<b>6,903</b>	<b>6.3%</b>	<b>23,727</b>	<b>23,321</b>	<b>1.7%</b>
<b>UNIVERSITY OF NEBRASKA MEDICAL CENTER</b>									
Undergraduate	741	736	0.7%	106	99	7.1%	847	835	1.4%
Graduate	165	173	-4.6%	293	293	0.0%	458	466	-1.7%
Professional	1,881	1,821	3.3%	477	452	5.5%	2,358	2,273	3.7%
<b>UNMC TOTAL</b>	<b>2,787</b>	<b>2,730</b>	<b>2.1%</b>	<b>876</b>	<b>844</b>	<b>3.8%</b>	<b>3,663</b>	<b>3,574</b>	<b>2.5%</b>
<b>UNIVERSITY OF NEBRASKA AT OMAHA</b>									
Undergraduate	10,141	10,124	0.2%	1,401	1,325	5.7%	11,542	11,449	0.8%
First-Time Freshmen	30	45	-33.3%	36	53	-32.1%	66	98	-32.7%
Graduate	2,141	2,160	-0.9%	762	722	5.5%	2,903	2,882	0.7%
<b>UNO TOTAL</b>	<b>12,282</b>	<b>12,284</b>	<b>0.0%</b>	<b>2,163</b>	<b>2,047</b>	<b>5.7%</b>	<b>14,445</b>	<b>14,331</b>	<b>0.8%</b>
<b>UNIVERSITY OF NEBRASKA AT KEARNEY</b>									
Undergraduate	3,971	4,086	-2.8%	599	688	-12.9%	4,570	4,774	-4.3%
First-Time Freshmen	14	20	-30.0%	16	8	100.0%	30	28	7.1%
Graduate	1,101	1,098	0.3%	534	559	-4.5%	1,635	1,657	-1.3%
<b>UNK TOTAL</b>	<b>5,072</b>	<b>5,184</b>	<b>-2.2%</b>	<b>1,133</b>	<b>1,247</b>	<b>-9.1%</b>	<b>6,205</b>	<b>6,431</b>	<b>-3.5%</b>
<b>UNIVERSITY OF NEBRASKA UNDERGRADUATE</b>	<b>28,974</b>	<b>29,081</b>	<b>-0.4%</b>	<b>6,758</b>	<b>6,416</b>	<b>5.3%</b>	<b>35,732</b>	<b>35,497</b>	<b>0.7%</b>
<b>FIRST-TIME FRESHMEN TOTAL</b>	<b>82</b>	<b>88</b>	<b>-6.8%</b>	<b>146</b>	<b>167</b>	<b>-12.6%</b>	<b>228</b>	<b>255</b>	<b>-10.6%</b>
<b>UNIVERSITY OF NEBRASKA GRADUATE</b>	<b>5,318</b>	<b>5,355</b>	<b>-0.7%</b>	<b>4,148</b>	<b>4,040</b>	<b>2.7%</b>	<b>9,466</b>	<b>9,395</b>	<b>0.8%</b>
<b>UNIVERSITY OF NEBRASKA PROFESSIONAL</b>	<b>2,241</b>	<b>2,180</b>	<b>2.8%</b>	<b>601</b>	<b>585</b>	<b>2.7%</b>	<b>2,842</b>	<b>2,765</b>	<b>2.8%</b>
<b>UNIVERSITY OF NEBRASKA TOTAL</b>	<b>36,533</b>	<b>36,616</b>	<b>-0.2%</b>	<b>11,507</b>	<b>11,041</b>	<b>4.2%</b>	<b>48,040</b>	<b>47,657</b>	<b>0.8%</b>

Source: UNL, UNO, UNK, UNMC Office of Institutional Research

(a) Residency status is determined by whether a student pays resident or nonresident tuition. An individual qualifies as a resident of the State of Nebraska for tuition purposes at the University of Nebraska if, prior to the beginning of the terms for which residency is sought, he/she meets the standards defined in any one of eleven categories. See The University of Nebraska Policy Manual, section RP-5.7.1, Residency Determination for Tuition Purposes.

**UNIVERSITY OF NEBRASKA**  
**SUMMARY OF STUDENT CREDIT HOURS**

Student credit hours are assigned to the campus which grants the credit to the student.  
Spring Semester, 2016

	<b>Spring 2016</b>	<b>Spring 2015</b>	<b>Difference</b>	<b>% Change</b>
UNL	289,432	284,356	5,076	1.8%
UNMC	50,544	49,138	1,406	2.9%
UNO	159,141	158,014	1,127	0.7%
UNK	68,336	71,672	(3,336)	-4.7%
<b>University of Nebraska Total</b>	<b>567,453</b>	<b>563,180</b>	<b>4,273</b>	<b>0.8%</b>

Source: UNL, UNO, UNK Office of Institutional Research; UNMC Office of Academic Records

Number of credit hours for each campus, with details by College of Faculty and College of Student follows.

**UNIVERSITY OF NEBRASKA-LINCOLN  
STUDENT CREDIT HOUR REPORT**

Student credit hours are assigned to the campus which grants the credit to the student.  
Spring Semester, 2016

COLLEGE OF FACULTY															
COLLEGE OF STUDENT	CASNR	Arch.	Arts & Sciences	Business Admin.	Educ. & Human Sciences	Engineering	Fine & Perf. Arts	Graduate Studies	Journalism & Mass Comm.	Law	ROTC	Other Units	Spring 2016 Total	Spring 2015 Total	Change From Spring 2015
Ag. Sci. & Nat. Res.	18,125	54	7,713	2,233	974	19	697		231		26	133	30,205	29,684	521
Architecture	76	4,535	790	108	131	24	167		9		2	25	5,867	5,857	10
Arts & Sciences	3,519	66	41,006	2,042	2,389	63	2,003		322		112	1,316	52,838	58,172	(5,334)
Business Administration	1,355	43	10,887	30,269	1,452	74	1,727		1,615		55	572	48,049	46,008	2,041
Education and Human Sciences	2,750	22	11,449	1,164	20,345	11	1,063		427		31	252	37,514	38,977	(1,463)
Engineering	2,566	455	11,358	1,139	195	16,355	515		426		45	467	33,521	33,852	(331)
Fine & Performing Arts	114	9	1,583	121	183		5,863		160		3	179	8,215	8,311	(96)
Journalism & Mass Communications	388	18	5,878	528	558	6	716		6,220		19	179	14,510	13,867	643
Explore Center Undergraduates	1,427	99	13,983	972	2,038	339	1,370		340		28	54	20,650	11,282	9,368
Visiting	72	3	247	12	72	27	13		6	17	6	1	476	502	(26)
Law			18	63	7		3			4,504		15	4,610	5,126	(516)
Graduate College	5,070	304	8,216	2,841	8,029	3,291	1,473		156	35	6	11	29,432	28,986	446
Dentistry													0	0	0
CPACS - UNO	145	3	1,739	117	266		168		6		57	28	2,529	2,606	(77)
Nursing - UNMC													0	0	0
Dental Graduates	6				12								18	13	5
Undergraduate - UNO	564	19				388							971	1,060	(89)
Graduate - UNO						27							27	53	(26)
<b>TOTAL Spring 2016</b>	<b>36,177</b>	<b>5,630</b>	<b>114,867</b>	<b>41,609</b>	<b>36,651</b>	<b>20,624</b>	<b>15,778</b>	<b>0</b>	<b>9,918</b>	<b>4,556</b>	<b>390</b>	<b>3,232</b>	<b>289,432</b>		
<b>TOTAL Spring 2015</b>	<b>35,321</b>	<b>5,686</b>	<b>114,992</b>	<b>39,220</b>	<b>37,099</b>	<b>20,470</b>	<b>15,459</b>	<b>0</b>	<b>7,996</b>	<b>5,078</b>	<b>349</b>	<b>2,686</b>		<b>284,356</b>	
<b>CHANGE FROM Spring 2015</b>	<b>856</b>	<b>(56)</b>	<b>(125)</b>	<b>2,389</b>	<b>(448)</b>	<b>154</b>	<b>319</b>	<b>0</b>	<b>1,922</b>	<b>(522)</b>	<b>41</b>	<b>546</b>			<b>5,076</b>
<b>% CHANGE</b>	<b>2.4%</b>	<b>-1.0%</b>	<b>-0.1%</b>	<b>6.1%</b>	<b>-1.2%</b>	<b>0.8%</b>	<b>2.1%</b>		<b>24.0%</b>	<b>-10.3%</b>	<b>11.7%</b>	<b>20.3%</b>			<b>1.8%</b>



**UNIVERSITY OF NEBRASKA AT OMAHA  
STUDENT CREDIT HOUR REPORT**

Student credit hours are assigned to the campus which grants the credit to the student.  
Spring Semester, 2016

COLLEGE OF FACULTY												
COLLEGE OF STUDENT	Arts & Sciences	Business Admin	Comm., Fine Arts and Media	CPACS	Education	ISTE	University Division	ROTC	Other Units (a)	Spring 2016 Total	Spring 2015 Total	Change From Spring 2015
Arts and Sciences	32,153	894	2,651	1,559	1,561	427	15	19	66	39,345	40,060	(715)
Business Administration	5,690	13,483	1,990	477	402	209	1	14	30	22,296	21,848	448
Communication, Fine Arts and Media	3,027	162	7,437	258	405	92	23	1	9	11,414	11,548	(134)
Education	5,090	129	1,230	510	9,600	24	1	9	12	16,605	16,803	(198)
Information Science & Technology	3,095	345	519	361	89	5,795	0	3	30	10,237	9,224	1,013
Non-Degree	1,128	243	164	115	146	76	26	0	0	1,898	1,908	(10)
CPACS	4,089	321	564	7,986	465	76	13	61	6	13,581	9,699	3,882
Division of Continuing Studies	6,349	600	1,165	1,768	872	482	0	10	0	11,246	11,866	(620)
University Division	4,743	288	1,029	477	350	193	58	3	0	7,141	7,320	(179)
Graduate College	2,867	2,160	740	3,536	4,849	2,935	0	0	0	17,087	17,505	(418)
Agriculture - UNL	97	0	18	0	1	0	0	0	0	116	147	(31)
Architecture - UNL	34	3	18	0	1	0	0	0	0	56	95	(39)
Engineering - UNL	3,953	369	457	57	43	336	0	15	3	5,233	5,387	(154)
Education and Human Sciences - UNL	0	0	0	0	0	0	0	0	0	0	7	(7)
Undergraduate - UNL CPACS	0	0	0	2,886	0	0	0	0	0	2,886	4,597	(1,711)
<b>TOTAL Spring 2016</b>	<b>72,315</b>	<b>18,997</b>	<b>17,982</b>	<b>19,990</b>	<b>18,784</b>	<b>10,645</b>	<b>137</b>	<b>135</b>	<b>156</b>	<b>159,141</b>		
<b>TOTAL Spring 2015</b>	<b>71,871</b>	<b>18,740</b>	<b>18,942</b>	<b>18,616</b>	<b>19,939</b>	<b>9,603</b>	<b>63</b>	<b>105</b>	<b>135</b>		<b>158,014</b>	
<b>CHANGE FROM Spring 2015</b>	<b>444</b>	<b>257</b>	<b>(960)</b>	<b>1,374</b>	<b>(1,155)</b>	<b>1,042</b>	<b>74</b>	<b>30</b>	<b>21</b>			<b>1,127</b>
<b>% CHANGE</b>	<b>0.6%</b>	<b>1.4%</b>	<b>-5.1%</b>	<b>7.4%</b>	<b>-5.8%</b>	<b>10.9%</b>	<b>117.5%</b>	<b>28.6%</b>	<b>15.6%</b>			<b>0.7%</b>

Source: UNO Institutional Research

a) Other Units include: Honors Colloquium, Library courses.

**UNIVERSITY OF NEBRASKA AT KEARNEY  
STUDENT CREDIT HOUR REPORT**

Student credit hours are assigned to the campus which grants the credit to the student.  
Spring Semester, 2016

<b>COLLEGE OF FACULTY</b>							
<b>CC</b>	<b>Business &amp; Tech</b>	<b>Education</b>	<b>Fine Arts &amp; Humanities</b>	<b>Natural &amp; Social Sciences</b>	<b>Spring 2016 Total</b>	<b>Spring 2015 Total</b>	<b>Change From Spring 2015</b>
Bu	10,151	425	1,807	2,947	15,330	15,897	(567)
Ed	874	8,167	2,341	3,313	14,695	15,641	(946)
Fir	316	737	4,774	1,484	7,311	7,835	(524)
Na	1,127	988	2,535	10,790	15,440	16,274	(834)
Un	882	489	1,561	3,518	6,450	6,648	(198)
No	168	88	303	192	751	862	(111)
Gr	270	5,169	694	2,226	8,359	8,515	(156)
<b>TC</b>	<b>13,788</b>	<b>16,063</b>	<b>14,015</b>	<b>24,470</b>	<b>68,336</b>		
<b>TC</b>	<b>14,516</b>	<b>16,821</b>	<b>14,151</b>	<b>26,184</b>		<b>71,672</b>	
<b>CH</b>	<b>(728)</b>	<b>(758)</b>	<b>(136)</b>	<b>(1,714)</b>			<b>(3,336)</b>
<b>%</b>	<b>-5.0%</b>	<b>-4.5%</b>	<b>-1.0%</b>	<b>-6.5%</b>			<b>-4.7%</b>

Source: UNK Institutional Research

**UNIVERSITY OF NEBRASKA MEDICAL CENTER  
STUDENT CREDIT HOUR REPORT**

Student credit hours are assigned to the campus which grants the credit to the student.  
Spring Semester, 2016

<b>COLLEGE OF STUDENT</b>	<b>Allied Health</b>	<b>Medicine</b>	<b>Nursing</b>	<b>Pharmacy</b>	<b>Dentistry</b>	<b>Public Health</b>	<b>Spring 2016 Total</b>	<b>Spring 2015 Total</b>	<b>Change From Spring 2015</b>
Allied Health	6,859	325	243				7,427	6,897	530
Allied Health non-degree	118						118	64	54
Visiting Non-degree AH	3						3	0	3
Nursing - Omaha			3,171				3,171	3,093	78
Nursing - Lincoln			2,159				2,159	2,240	-81
Nursing - Kearney			1,348				1,348	1,385	-37
Nursing - Scottsbluff			1,041				1,041	1,041	0
Nursing - Norfolk			1,220				1,220	1,296	-76
Nursing - Certificate			108				108	116	-8
Nursing - MSN			1,401			24	1,425	1,524	-99
Nursing - DNP			263			75	338	107	231
Dentistry - DDS					3,908		3,908	3,925	-17
Dental Hygiene					756		756	729	27
Dental Certification Program					480		480	480	0
Medicine (M.D.)		10,230					10,230	10,137	93
Post M.D.		8,342					8,342	7,936	406
Medical Family Therapy		33					33	15	18
Radiology Oncology Physics		22					22	22	0
Pharmacy	63	535		3,312			3,910	3,836	74
Pharmacy Certification Program				192			192	144	48
Public Health MPH						1,138	1,138	931	207
Certificate PH				9		146	155	197	-43
<b>Graduate</b>	<b>22</b>	<b>1,674</b>	<b>122</b>	<b>395</b>	<b>43</b>	<b>765</b>	<b>3,021</b>	<b>3,023</b>	<b>-2</b>
<b>TOTAL Spring 2016</b>	<b>7,065</b>	<b>21,161</b>	<b>11,076</b>	<b>3,907</b>	<b>5,187</b>	<b>2,148</b>	<b>50,544</b>		
<b>TOTAL Spring 2015</b>	<b>6,715</b>	<b>20,448</b>	<b>11,141</b>	<b>3,810</b>	<b>5,227</b>	<b>1,797</b>	<b>49,138</b>	<b>49,138</b>	
<b>CHANGE FROM Spring 2015</b>	<b>350</b>	<b>713</b>	<b>-65</b>	<b>97</b>	<b>-40</b>	<b>351</b>	<b>1,406</b>		<b>1,406</b>
<b>% CHANGE</b>	<b>5.2%</b>	<b>3.5%</b>	<b>-0.6%</b>	<b>2.5%</b>	<b>-0.8%</b>	<b>19.5%</b>	<b>2.9%</b>		<b>2.9%</b>

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Renaming the Division of Clinical Laboratory Science to the Division of Medical Laboratory Science in the College of Allied Health Professions at the University of Nebraska Medical Center (UNMC)

RECOMMENDED ACTION: Report

PREVIOUS ACTION: March 5, 2005 – The Board approved the new Division of Laboratory Sciences in the School of Allied Health Professions in the College of Medicine, and the name change of the Medical Technology program to the Clinical Laboratory Science program at UNMC

EXPLANATION: The proposed name change more accurately reflects the role of these health care professionals within the national laboratory professional community, and represents the contemporary nomenclature used by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) as well as other universities hosting this program of study.  
  
The proposal has been reviewed by the Council of Academic Officers.

COST: \$0

SOURCE OF FUNDS: Not applicable

SPONSOR: H. Dele Davies  
Vice Chancellor for Academic Affairs  
University of Nebraska Medical Center

APPROVED: Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center  
  
Hank M. Bounds, President  
University of Nebraska

DATE: February 26, 2016

TO: The Board of Regents Addendum VIII-D-4  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Quarterly Status of Capital Construction Projects

RECOMMENDED ACTION: Report

EXPLANATION: This is a summary report of projects included in the Quarterly Capital Construction Report required by state statute. Inclusion in the report commences with Board of Regents approval and ends one year following substantial completion.

The report fulfills the requirements of R.P.6.3.6.2.e and R.P. 6.3.6.4 and contains the campus and project name, designer and contractor, contracting method, contract status, stage of construction, and approved budget categories for the period ending December 31, 2015. The report is available at: <http://nebraska.edu/docs/facilities/2015-12-31QuarterlyStatusOfCapitalConstructionProjects.pdf>

SPONSOR: Rebecca H. Koller  
Assistant Vice President for Business & Finance  
Director of Facilities Planning & Management

APPROVED: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016

**University of Nebraska**  
**Quarterly Status of Capital Construction Projects**

As of December 31 2015

**KEARNEY**

**Health Sciences Education Building**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	3/15/2013	Construction: \$14,049,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	1/31/2014	Non Construction: \$4,951,000	A/E Consultant Selection	RDG Planning & Design	3/11/2013	\$1,248,000	0	\$0		
<b>Construction Complete:</b>	7/1/2015	Total Project Cost: \$19,000,000	Low Responsible Bid	Hausmann Construction	4/3/2014	\$11,373,000	7	\$336,542	8/10/2015	
		% funds expended: 85%								
		<b>Funding Source</b>								
		State Appropriations \$15,000,000								
		Private/Trust \$4,000,000								
		Total Funding \$19,000,000								

**Public Streets & Utilities to University Village**

<b>Phase:</b>	Construction	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	11/20/2014	Construction:	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>		Non Construction: \$2,300,000	A/E Four Year Consultant	Alvine Engineering	12/15/2014	\$181,000	0	\$0		
<b>Construction Complete:</b>		Total Project Cost: \$2,300,000	Low Responsible Bid	Midlands Contracting, Inc.	6/4/2015	\$2,004,118	0	\$0	12/1/2015	
		% funds expended: 30%								
		<b>Funding Source</b>								
		Campus Funds/Cash \$2,300,000								
		Total Funding \$2,300,000								

**University Village Student Housing**

<b>Phase:</b>	Design	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	4/10/2015	Construction: \$14,127,365	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	3/31/2016	Non Construction: \$1,872,635	A/E Consultant Selection	Holland Basham Architects	10/5/2015	\$1,089,836	0	\$0		
<b>Construction Complete:</b>	6/30/2017	Total Project Cost: \$16,000,000	Low Responsible Bid	Contractor TBD		\$0	0	\$0		
		% funds expended: 0%								
		<b>Funding Source</b>								
		Revenue Bonds \$4,000,000								
		Revenue Bonds \$12,000,000								
		Total Funding \$16,000,000								

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**LINCOLN**

**17th Street Dining Complex**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	11/20/2014	Construction:	\$24,765,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	10/30/2015	Non Construction:	\$8,323,000	Design/Build	Sampson Construction	8/7/2015	\$24,500,000	2	\$178,457	3/15/2017
<b>Construction Complete:</b>	3/31/2017	Total Project Cost:	\$33,088,000							
		% funds expended:	8%							
		<b>Funding Source</b>								
		Revenue Bonds	\$32,088,000							
		Revenue Bonds	\$1,000,000							
		Total Funding	\$33,088,000							

**18th/19th & R Residence Hall**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	6/17/2011	Construction:	\$57,393,102	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	1/30/2012	Non Construction:	\$13,988,898	Design/Build	Sampson Construction	10/14/2011	\$55,850,000	6	\$392,374	12/31/2014
<b>Construction Complete:</b>	6/30/2014	Total Project Cost:	\$71,382,000							
		% funds expended:	89%							
		<b>Funding Source</b>								
		Revenue Bonds	\$71,382,000							
		Total Funding	\$71,382,000							

**Behlen Laboratory Renovation (Floors 1-3)**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	1/24/2014	Construction:	\$8,273,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	2/27/2015	Non Construction:	\$1,515,000	A/E Consultant Selection	Sinclair Hille Architects	7/8/2014	\$587,435	1	\$119,051	
<b>Construction Complete:</b>	2/27/2016	Total Project Cost:	\$9,788,000	Low Responsible Bid	Meco-Henne Contractors, Inc	5/21/2015	\$7,750,000	0	\$0	8/19/2016
		% funds expended:	16%							
		<b>Funding Source</b>								
		Campus Funds/Cash	\$6,500,000							
		Private/Trust	\$3,288,000							
		Total Funding	\$9,788,000							

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**LINCOLN**

**Breslow Ice Center**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	3/21/2014	Construction: \$9,500,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	9/29/2014	Non Construction: \$1,500,000	CM at Risk	Kingery Construction	11/11/2014	\$9,261,392	1	\$133,406	12/22/2015	
<b>Construction Complete:</b>	8/31/2015	Total Project Cost: \$11,000,000	Foundation A/E	DLR Group Inc	3/21/2008		0	\$0		
		% funds expended: 67%								
		<b>Funding Source</b>								
		Auxiliary \$1,000,000								
		Private/Trust \$10,000,000								
		Total Funding \$11,000,000								

**C.Y. Thompson Learning Commons**

<b>Phase:</b>	On Hold	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	9/19/2014	Construction: \$16,477,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	9/30/2015	Non Construction: \$6,023,000	A/E Consultant Selection	DLR Group Inc	2/11/2015	\$1,260,000	0	\$0		
<b>Construction Complete:</b>	9/30/2016	Total Project Cost: \$22,500,000	Low Responsible Bid	Contractor TBD		\$0	0	\$0		
		% funds expended: 2%								
		<b>Funding Source</b>								
		Campus Funds/Cash \$2,500,000								
		Private/Trust \$20,000,000								
		Total Funding \$22,500,000								

**College of Business Administration Replacement Building**

<b>Phase:</b>	Construction	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	9/14/2012	Construction: \$67,363,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	12/29/2014	Non Construction: \$16,637,000	A/E Consultant Selection	Alley Poyner Macchietto Arch	3/15/2013	\$6,145,000	2	\$54,910		
<b>Construction Complete:</b>	1/30/2017	Total Project Cost: \$84,000,000	Low Responsible Bid	Hausmann Construction	3/24/2015	\$58,148,000	3	\$326,532	3/14/2017	
		% funds expended: 17%								
		<b>Funding Source</b>								
		Private/Trust \$84,000,000								
		Total Funding \$84,000,000								



**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**LINCOLN**

**Devaney Sports Center Replace Exterior Panel System**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	9/14/2012	Construction:	\$6,527,799	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	3/29/2013	<u>Non Construction:</u>	<u>\$472,201</u>	A/E Four Year Consultant	The Clark Enersen Partners	10/9/2012	\$200,000	0	\$0	
<b>Construction Complete:</b>	9/1/2018	Total Project Cost:	\$7,000,000	Low Responsible Bid	Hausmann Construction	7/29/2014	\$5,120,000	5	\$121,052	1/30/2016
		% funds expended:	88%	Low Responsible Bid	Hausmann Construction	3/27/2013	\$729,000	5	\$345,746	8/22/2014
		<b>Funding Source</b>								
		Auxiliary	\$7,000,000							
		Total Funding	\$7,000,000							

**East Campus Recreation Center**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	6/17/2011	Construction:	\$12,072,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	10/30/2012	<u>Non Construction:</u>	<u>\$2,814,000</u>	A/E Consultant Selection	Sinclair Hille Architects	11/8/2011	\$808,850	3	\$95,095	
<b>Construction Complete:</b>	1/30/2015	Total Project Cost:	\$14,886,000	Low Responsible Bid	Sampson Construction	10/14/2013	\$9,505,400	15	\$1,390,542	8/7/2015
		% funds expended:	96%							
		<b>Funding Source</b>								
		Revenue Bonds	\$14,886,000							
		Total Funding	\$14,886,000							

**East Campus Residential Hall**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	11/20/2014	Construction:	\$31,542,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	8/31/2015	<u>Non Construction:</u>	<u>\$5,966,000</u>	Design/Build	Sampson Construction	8/7/2015	\$28,500,000	0	\$0	5/1/2017
<b>Construction Complete:</b>	5/31/2017	Total Project Cost:	\$37,508,000							
		% funds expended:	8%							
		<b>Funding Source</b>								
		Revenue Bonds	\$35,898,000							
		Revenue Bonds	\$800,000							
		Campus Funds/Cash	\$810,000							
		Total Funding	\$37,508,000							

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**LINCOLN**

**Health Center & College of Nursing (UNMC/UNL)**

<b>Phase:</b>	Design	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	6/12/2015	Construction:	\$33,622,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	6/1/2016	Non Construction:	\$7,877,000	A/E Consultant Selection	Alley Poyner Macchietto Arch	11/23/2015	\$2,538,000	0	\$0	
<b>Construction Complete:</b>	11/1/2017	Total Project Cost:	\$41,499,000	Low Responsible Bid	Contractor TBD		\$0	0	\$0	
		% funds expended:	0%							
		<b>Funding Source</b>								
		Other	\$5,650,000							
		Auxiliary	\$23,999,000							
		State Appropriations	\$12,000,000							
		Total Funding	\$41,649,000							

**Library Depository Retrieval Addition**

<b>Phase:</b>	Design	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	10/9/2015	Construction:	\$3,730,320	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	7/1/2016	Non Construction:	\$485,680	A/E Four Year Consultant	The Clark Enersen Partners	10/15/2015	\$305,000	0	\$0	
<b>Construction Complete:</b>	4/1/2017	Total Project Cost:	\$4,216,000	Low Responsible Bid	Contractor TBD		\$0	0	\$0	
		% funds expended:	1%							
		<b>Funding Source</b>								
		Private/Trust	\$4,216,000							
		Total Funding	\$4,216,000							

**Love North Learning Commons**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	1/24/2014	Construction:	\$7,373,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	11/28/2014	Non Construction:	\$2,627,000	A/E Four Year Consultant	Holland Basham Architects		\$398,500	0	\$0	
<b>Construction Complete:</b>	7/1/2015	Total Project Cost:	\$10,000,000	Low Responsible Bid	Sampson Construction	12/16/2014	\$6,229,700	3	\$256,583	12/6/2015
		% funds expended:	79%							
		<b>Funding Source</b>								
		Campus Funds/Cash	\$3,053,000							
		Auxiliary	\$500,000							
		Private/Trust	\$6,447,000							
		Total Funding	\$10,000,000							

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**LINCOLN**

**Manter Hall Renovation**

Phase: Construction  
BoR Project Approved: 1/24/2014  
Construction Start: 9/30/2014  
Construction Complete: 12/1/2015

**Approved Budget**  
Construction: \$6,972,000  
Non Construction: \$1,153,000  
Total Project Cost: \$8,125,000  
% funds expended: 80%

**Funding Source**  
Campus Funds/Cash \$8,125,000  
Total Funding \$8,125,000

**Contracts**

Contracting Method	Provider	Date	Amount	CO No.	CO Amt.	Sub. Comp.
A/E Four Year Consultant	HDR Architecture, Inc.	10/2/2013	\$385,000	1	\$14,615	
Low Responsible Bid	Whiting-Turner	7/16/2015	\$6,067,000	0	\$0	12/18/2015

**McCollum Hall Clinics Addition**

Phase: Construction  
BoR Project Approved: 9/19/2014  
Construction Start: 5/29/2015  
Construction Complete: 4/28/2016

**Approved Budget**  
Construction: \$3,705,000  
Non Construction: \$1,384,000  
Total Project Cost: \$5,089,000  
% funds expended: 11%

**Funding Source**  
Private/Trust \$5,089,000  
Total Funding \$5,089,000

**Contracts**

Contracting Method	Provider	Date	Amount	CO No.	CO Amt.	Sub. Comp.
A/E Four Year Consultant	The Clark Enersen Partners	9/30/2014	\$240,000	0	\$0	
Low Responsible Bid	Cheever Construction	8/11/2015	\$3,886,000	0	\$0	11/11/2016

**Memorial Stadium Fan Experience Improvements**

Phase: Warranty  
BoR Project Approved: 1/24/2014  
Construction Start: 3/30/2014  
Construction Complete: 8/1/2014

**Approved Budget**  
Construction: \$3,237,000  
Non Construction: \$9,063,000  
Total Project Cost: \$12,300,000  
% funds expended: 91%

**Funding Source**  
Private/Trust \$12,300,000  
Total Funding \$12,300,000

**Contracts**

Contracting Method	Provider	Date	Amount	CO No.	CO Amt.	Sub. Comp.
A/E Four Year Consultant	The Clark Enersen Partners	1/27/2014	\$193,605	1	\$4,500	
Low Responsible Bid	CDW Govt Inc.		\$6,280,948	3	\$297,546	12/16/2014
Low Responsible Bid	Downs Electric	4/14/2014	\$2,056,265	5	\$59,258	9/1/2014

**Morrill Hall 4th Floor Redevelopment**

Phase: On Hold  
BoR Project Approved: 6/12/2015  
Construction Start: 8/1/2016  
Construction Complete: 4/1/2018

**Approved Budget**  
Construction: \$9,612,000  
Non Construction: \$1,821,000  
Total Project Cost: \$11,433,000  
% funds expended: 0%

**Funding Source**  
Private/Trust \$11,433,000  
Total Funding \$11,433,000

**Contracts**

Contracting Method	Provider	Date	Amount	CO No.	CO Amt.	Sub. Comp.
A/E Consultant Selection	Consultant TBD		\$0	0	\$0	
Low Responsible Bid	Contractor TBD		\$0	0	\$0	

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**LINCOLN**

**Nebraska Soccer and Tennis Complex**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	7/18/2013	Construction:	\$18,421,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	5/30/2014	<u>Non Construction:</u>	<u>\$1,979,000</u>	A/E Consultant Selection	RDG Planning & Design	11/12/2013	\$950,000	2	\$35,500	
<b>Construction Complete:</b>	1/30/2015	Total Project Cost:	\$20,400,000	Low Responsible Bid	Sampson Construction	5/1/2014	\$14,224,000	13	\$646,031	6/5/2015
		% funds expended:	99%	Low Responsible Bid	Land Construction	11/6/2013	\$693,900	2	(\$130,959)	2/11/2014
		<b>Funding Source</b>								
		Private/Trust	\$20,400,000							
		Total Funding	\$20,400,000							

**Nebraska Veterinary Diagnostic Center**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	1/25/2013	Construction:	\$35,315,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	8/29/2014	<u>Non Construction:</u>	<u>\$9,389,000</u>	A/E Consultant Selection	RDG Planning & Design	2/4/2014	\$1,330,200	2	\$1,743,670	
<b>Construction Complete:</b>	8/1/2016	Total Project Cost:	\$44,704,000	Low Responsible Bid	Sampson Construction	6/23/2015	\$23,159,000	1	\$7,871	12/24/2016
		% funds expended:	14%							
		<b>Funding Source</b>								
		State Appropriations	\$40,644,000							
		Private/Trust	\$5,000,000							
		Total Funding	\$45,644,000							

**Quilt Center Addition**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	3/15/2013	Construction:	\$4,177,485	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>		<u>Non Construction:</u>	<u>\$2,822,515</u>	Foundation A/E	Design Services Gifted		\$0	0	\$0	
<b>Construction Complete:</b>		Total Project Cost:	\$7,000,000	Low Responsible Bid	Sampson Construction	6/4/2014	\$3,659,000	4	\$93,832	2/9/2015
		% funds expended:	68%							
		<b>Funding Source</b>								
		Private/Trust	\$7,000,000							
		Total Funding	\$7,000,000							

**University of Nebraska**  
**Quarterly Status of Capital Construction Projects**

As of December 31 2015

**MEDICAL CENTER**

**Cancer Research Center**

<b>Phase:</b>	Construction	<b>Approved Budget</b>	<b>Contracts</b>						
<b>BoR Project Approved:</b>	11/29/2012	Construction: \$82,296,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	8/30/2013	Non Construction: \$27,704,000	Development Corp	Kiewit Building Group	5/31/2013	\$89,729,357	3	\$303,117	12/30/2016
<b>Construction Complete:</b>	3/1/2017	Total Project Cost: \$110,000,000	Development Corp	HDR Architecture, Inc.	4/22/2013	\$6,465,301	1	\$95,436	
		% funds expended: 58%							
		<b>Funding Source</b>							
		Campus Funds/Cash \$700,000							
		Private/Trust \$60,300,000							
		State Appropriations \$50,000,000							
		Total Funding \$111,000,000							

**College of Pharmacy and Center for Drug Discovery**

<b>Phase:</b>	Construction	<b>Approved Budget</b>	<b>Contracts</b>						
<b>BoR Project Approved:</b>	1/25/2013	Construction: \$28,997,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>		Non Construction: \$6,003,000	A/E Consultant Selection	The Clark Enersen Partners	3/15/2013	\$2,075,000	0	\$0	
<b>Construction Complete:</b>	8/1/2015	Total Project Cost: \$35,000,000	Low Responsible Bid	Hausmann Construction	5/28/2014	\$22,307,555	9	\$936,771	4/10/2016
		% funds expended: 69%							
		<b>Funding Source</b>							
		Private/Trust \$35,000,000							
		Total Funding \$35,000,000							

**CUP Utilities Plant Central - Upgrade Energy Mgmt. and HW System**

<b>Phase:</b>	Construction	<b>Approved Budget</b>	<b>Contracts</b>						
<b>BoR Project Approved:</b>	3/21/2014	Construction: \$8,036,457	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>		Non Construction: \$0	A/E Four Year Consultant	HDR Architecture, Inc.	7/19/2013	\$76,000	0	\$0	
<b>Construction Complete:</b>		Total Project Cost: \$8,036,457	Low Responsible Bid	Grunwald Mechanical	7/1/2014	\$2,279,000	3	\$107,465	6/30/2015
		% funds expended: 38%							
		<b>Funding Source</b>							
		Revenue Bonds \$6,079,312							
		Campus Funds/Cash \$1,957,145							
		Total Funding \$8,036,457							

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**MEDICAL CENTER**

**East Utility Plant - Expansion & Electrical Distribution Projects**

<b>Phase:</b>	Construction	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	3/21/2014	Construction:	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	4/30/2014	<u>Non Construction:</u>	A/E Four Year Consultant	HDR Architecture, Inc.	5/13/2013	\$77,000	1	\$19,400		
<b>Construction Complete:</b>	6/1/2015	Total Project Cost:	Low Responsible Bid	Boyd Jones Construction	5/1/2014	\$3,993,000	11	\$225,136	6/1/2015	
		% funds expended:								
		54%								
		<b>Funding Source</b>								
		Private/Trust								
		\$675,000								
		Campus Funds/Cash								
		\$7,897,766								
		LB 309								
		\$825,000								
		<u>Total Funding</u>								
		\$9,397,766								

**Global Center for Advanced Interprofessional Learning**

<b>Phase:</b>	Planning	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	10/9/2015	Construction:	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	1/1/2017	<u>Non Construction:</u>	A/E Consultant Selection	Consultant TBD		\$0	0	\$0		
<b>Construction Complete:</b>	6/1/2018	Total Project Cost:	Low Responsible Bid	Contractor TBD		\$0	0	\$0		
		% funds expended:								
		0%								
		<b>Funding Source</b>								
		Private/Trust								
		\$77,000,000								
		State Appropriations								
		\$25,000,000								
		<u>Total Funding</u>								
		\$102,000,000								

**Skywalk - Trulsen to Lauritzen**

<b>Phase:</b>	On Hold	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	1/30/2015	Construction:	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>		<u>Non Construction:</u>	Private	Contractor TBD		\$0	0	\$0		
<b>Construction Complete:</b>		Total Project Cost:								
		\$2,500,000								
		% funds expended:								
		0%								
		<b>Funding Source</b>								
		Private/Trust								
		\$2,500,000								
		<u>Total Funding</u>								
		\$2,500,000								

**University of Nebraska**  
**Quarterly Status of Capital Construction Projects**

As of December 31 2015

**MEDICAL CENTER**

**Student Life Center Addition and Renovation**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	5/30/2014	Construction:	\$5,000,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	3/31/2015	Non Construction:	\$1,000,000	A/E Four Year Consultant	Leo A. Daly Company	11/6/2014	\$350,000	0	\$0	
<b>Construction Complete:</b>	3/31/2016	Total Project Cost:	\$6,000,000	Low Responsible Bid	Construct, Inc.	7/21/2015	\$3,811,800	0	\$0	5/31/2016
		% funds expended:	29%							
		<b>Funding Source</b>								
		Private/Trust	\$6,000,000							
		Total Funding	\$6,000,000							

**OMAHA**

**Baxter Arena**

<b>Phase:</b>	Warranty	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	3/15/2013	Construction:	\$68,000,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	12/1/2013	Non Construction:	\$13,600,000	Development Corp	HDR Architecture, Inc.	2/8/2013	\$4,500,000	2	\$739,388	
<b>Construction Complete:</b>	8/1/2015	Total Project Cost:	\$81,600,000	Development Corp	Kiewit Building Group	10/7/2013	\$67,015,488	15	\$5,218,250	9/30/2015
		% funds expended:	95%							
		<b>Funding Source</b>								
		Other	\$39,000,000							
		Campus Funds/Cash	\$3,600,000							
		Private/Trust	\$39,000,000							
		Total Funding	\$81,600,000							

**Milo Bail Student Center Addition**

<b>Phase:</b>	Construction	<b>Approved Budget</b>		<b>Contracts</b>						
<b>BoR Project Approved:</b>	5/30/2014	Construction:	\$16,400,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>
<b>Construction Start:</b>	5/15/2015	Non Construction:	\$3,600,000	A/E Consultant Selection	BCDM Architects	12/11/2014	\$1,232,000	0	\$0	
<b>Construction Complete:</b>	8/1/2016	Total Project Cost:	\$20,000,000	CM at Risk	Weitz Company, LLC	4/1/2015	\$15,900,000	0	\$0	8/1/2016
		% funds expended:	25%							
		<b>Funding Source</b>								
		Revenue Bonds	\$2,700,000							
		Campus Funds/Cash	\$2,000,000							
		Revolving	\$6,300,000							
		Revenue Bonds	\$9,000,000							
		Total Funding	\$20,000,000							

**University of Nebraska  
Quarterly Status of Capital Construction Projects**

As of December 31 2015

**OMAHA**

**Pacific Campus Parking Garage**

<b>Phase:</b>	Planning	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	8/6/2015	Construction: \$28,471,900	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	11/1/2015	<u>Non Construction: \$2,828,100</u>	Design/Build	Sampson Construction	12/22/2015	\$26,747,000	0	\$0	6/16/2017	
<b>Construction Complete:</b>	8/1/2017	Total Project Cost: \$31,300,000								
		% funds expended: 0%								
		<b>Funding Source</b>								
		Revenue Bonds \$6,300,000								
		Revenue Bonds \$4,800,000								
		<u>Revenue Bonds \$20,200,000</u>								
		Total Funding \$31,300,000								

**Strauss Performing Arts Center Addition & Renovation**

<b>Phase:</b>	On Hold	<b>Approved Budget</b>	<b>Contracts</b>							
<b>BoR Project Approved:</b>	5/30/2014	Construction: \$10,215,000	<b>Contracting Method</b>	<b>Provider</b>	<b>Date</b>	<b>Amount</b>	<b>CO No.</b>	<b>CO Amt.</b>	<b>Sub. Comp.</b>	
<b>Construction Start:</b>	3/1/2015	<u>Non Construction: \$4,139,000</u>	A/E Consultant Selection	HDR Architecture, Inc.	11/18/2014	\$902,000	0	\$0		
<b>Construction Complete:</b>	6/1/2016	Total Project Cost: \$14,354,000	CM at Risk	Weitz Company, LLC	4/1/2015	\$28,800	0	\$0		
		% funds expended: 1%								
		<b>Funding Source</b>								
		Private/Trust \$14,354,000								
		<u>Total Funding \$14,354,000</u>								



TO: The Board of Regents AddendumVIII-D-5

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Status Report of Six-Year Capital Plan

RECOMMENDED ACTION: Report

EXPLANATION: The Six-Year Capital Plan consists of the campus' highest priority projects, regardless of funding sources, for which they anticipate funding in the next six years. Projects move from the 'On Deck List' to the Plan as funding possibilities progress. An update of the Six-Year Capital Plan is provided on a quarterly basis. The report is available at:  
<http://nebraska.edu/docs/facilities/2016-02-24SixYearCapitalPlan.pdf>

SPONSOR: Rebecca H. Koller  
Assistant Vice President for Business & Finance  
Director of Facilities Planning & Management

APPROVED: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016

# University of Nebraska

## Six-Year Capital Plan

As of February 24, 2016

### Unprioritized

Campus	Project Title	Estimate	State Funding	Other Funding	State O & M
<b>State Funded</b>					
UN	USPFO Building Renovation	\$5,100,000	\$5,100,000		\$157,500 (2)
UNK	Fine Arts Renovation & Addition	\$21,500,000	\$21,500,000		TBD
UNK	Otto Olsen II	\$31,500,000	\$31,500,000		TBD
UNK	Martin Hall Renovation	\$8,000,000	\$8,000,000		TBD
UNL	Chemistry Labs (Manter/Hamilton Hall Renovations)	\$15,000,000	\$15,000,000		TBD
UNL	Engineering Complex (Walter Scott, Scott Link, Nebraska Hall) Renovations	\$180,000,000	\$100,000,000	\$80,000,000	TBD
UNL	Interdisciplinary Ed. and Early Childhood Research Center- Mabel Lee Renovation	\$40,000,000	\$40,000,000		TBD
UNL	East Campus Undergraduate Learning Space Revitalization- Food Ind. Complex	\$17,000,000	\$17,000,000		TBD
UNL	College of Business Administration (old) Renovations	\$20,000,000	\$20,000,000		TBD
UNO	Metropolitan STEM Center	\$153,000,000	TBD		TBD
		\$491,100,000	\$258,100,000	\$80,000,000	\$157,500
<b>Non-State Funded</b>					
UNK	Early Childhood Education Center	\$6,000,000		\$6,000,000	TBD
UNL	C. Y. Thompson Library Renovation	\$22,500,000		\$22,500,000	TBD (2)
UNL	Life Science Teaching Labs	\$20,000,000		\$20,000,000	TBD
UNL	Morrill Hall Renovation	\$11,500,000		\$11,500,000	TBD (2)
UNL	Neihardt Renovations	\$14,750,000		\$14,750,000	\$0
UNL	Utilities Infrastructure Improvements (City and East Campuses)	\$64,450,000		\$64,450,000	TBD
UNL	Whittier Auditorium Renovation	\$2,000,000		\$2,000,000	TBD
UNMC	College of Dentistry Addition	\$15,200,000		\$15,200,000	TBD
UNO	Peter Kiewit Institute Addition	\$57,800,000		TBD	TBD
UNO	Strauss Performing Arts Center Addition & Renovation	\$18,000,000	\$6,100,000	\$11,900,000	TBD (2)
UNO	West Center Campus Development	\$35,000,000		\$35,000,000	TBD
		\$267,200,000	\$6,100,000	\$203,300,000	\$0
<b>TBD or Mixed Funding</b>					
UN	Fire & Life Safety/Code Compliance	TBD			TBD (4)
UNL	Interdisciplinary Engineering and Life Science Teaching & Research Complex	\$150,000,000			TBD
		\$150,000,000	\$0	\$0	\$0

Notes:

(1) Moved from On-Deck

(2) Program approved by the Board of Regents. Increases to be resubmitted for approval.

(3) New Project

(4) May change to represent 40% of 309 Task Force funding over the next 6 years.

# University of Nebraska

## Six-Year Capital Plan

As of February 24, 2016

### On-Deck

Campus	Project Title	Estimate	State Funding	Other Funding	State O & M
<b>State Funded</b>					
NCTA	Master Plan - Campus Renovation	\$3,025,000	\$3,025,000		TBD
NCTA	Student Union	\$8,640,000	\$8,640,000		TBD
UNK	Calvin T. Ryan Library Renovation & Addition	\$14,580,000	\$14,580,000		\$442,000
UNK	Cushing Coliseum Renovation & Addition	\$2,495,000	\$2,495,000		\$25,000
UNK	Frank House	\$3,405,000	\$3,405,000		\$69,000
UNK	General Services Building Renovation (Ed Center)	\$6,480,000	\$6,480,000		\$120,000
UNK	Memorial Student Affairs Building	\$6,265,000	\$6,265,000		\$1,543,000
UNK	Thomas Hall Renovation	\$3,402,000	\$3,402,000		\$69,000
UNK	West Center East Wing	\$6,805,000	\$6,805,000		\$100,000
UNL	Campus-wide Classroom Improvements	\$5,000,000	\$5,000,000		TBD
UNL	Greater Nebraska Projects	\$45,000,000	\$45,000,000		TBD
UNL	Undergraduate Academic Classroom Facility	\$40,500,000	\$40,500,000		TBD
UNL	Vet Basic Sciences Building Structural Repairs	TBD	TBD		TBD
UNL	Westbrook Music Building Renovation and Expansion	TBD	TBD		TBD
UNO	Central Services Building	\$13,800,000	\$13,800,000		TBD
UNO	Radio/TV and Communications Facility	\$25,300,000	\$25,300,000		TBD
UNO	Renovation and Addition to CPACS	\$18,200,000	\$18,200,000		TBD
		\$202,897,000	\$202,897,000	\$0	\$2,368,000

Notes:

- (1) Moved from On-Deck
- (2) Program approved by the Board of Regents. Increases to be resubmitted for approval.
- (3) New Project
- (4) May change to represent 40% of 309 Task Force funding over the next 6 years.

# University of Nebraska

## Six-Year Capital Plan

As of February 24, 2016

### On-Deck

Campus	Project Title	Estimate	State Funding	Other Funding	State O & M
<b>Non-State Funded</b>					
UNL	Cather/Pound Hall & Cather/Pound Dining Demolition	TBD			TBD
UNL	Durham School of Construction	TBD			TBD
UNL	Physical Science Research Facility	TBD			TBD
UNL	Selleck Renovations	\$15,900,000		\$15,900,000	TBD
UNL	Sheldon Haymarket	TBD			TBD
UNMC	Biomedical Technology Center	\$25,000,000		\$25,000,000	\$1,294,000
UNMC	Research Center of Excellence III	\$119,000,000		\$119,000,000	TBD
UNO	Parking Structure on the Dodge Campus	\$17,500,000		\$17,500,000	TBD
UNO	Student Housing	TBD		TBD	TBD
		\$177,400,000	\$0	\$177,400,000	\$1,294,000
<b>TBD or Mixed Funding</b>					
UN	Technology Development Center (NCITE)	\$17,000,000			TBD
UNL	Manter-Hamilton Hall Science Addition	TBD			TBD
UNL	Museums- Nebraska Hall Specimen Collection Relocation	TBD			TBD
UNL	Textron Redevelopment	TBD			TBD
UNL	Woods Hall Renovation/Reconstruction	TBD			TBD
UNMC	Central Utilities Plant Structural Renovation & Boiler Replacement	\$10,000,000			TBD
UNMC	College of Nursing Modernization - at Omaha	\$9,300,000			TBD
UNMC	Williams Science Hall Modernization (formerly College of Pharmacy)	\$13,400,000			TBD
UNMC	Wittson Hall Modernization	\$16,300,000			TBD
UNO	Academic Building	TBD			TBD
UNO	Arts & Sciences Hall Renovation	\$16,000,000	TBD		TBD
UNO	Mammel Hall Addition	\$19,600,000	TBD	TBD	TBD
UNO	Durham Science Center Renovation	\$20,000,000	TBD		TBD
		\$121,600,000	\$0	\$0	\$0

Notes:

- (1) Moved from On-Deck
- (2) Program approved by the Board of Regents. Increases to be resubmitted for approval.
- (3) New Project
- (4) May change to represent 40% of 309 Task Force funding over the next 6 years.

TO: The Board of Regents Addendum VIII-D-6

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Members of the University of Nebraska Project Review Board Pool

RECOMMENDED ACTION: Report

PREVIOUS ACTION: March 21, 2014 – A report was submitted to the Board of Regents listing members serving as the Project Review Board pool.

EXPLANATION: The University of Nebraska wishes to extend service of previously approved Project Review Board and appoint new members from within and outside the University to serve in the Project Review Board pool. The members were selected by a selection committee, consisting of the Assistant Vice President for Business and Finance/Director of Facilities Planning and Management, and the Facility Directors of each campus, and make the following appointments.

External Members

Michael Alley, architect  
John Badami, architect  
Douglas Bisson, planner  
Patricia Birch, architect  
Michael Brady, engineer  
Kevin Clark, architect  
Donald Foster, engineer  
Charles Huddleston, engineer  
Lynn Jones, architect  
Martin Kasl, engineer  
Vishal Khanna, engineer  
JoAnne Kissel, planner  
George Morrissey, engineer  
Toby Samuelson, engineer  
Dennis Scheer, landscape architect  
Philip Schreier, engineer  
John Sinclair, architect  
Curt Witzenburg, architect  
Richard Woodson, engineer  
Reed Miller, engineer

Internal Members

Audrey Buckley, UNO architect  
Robert Dietrich, UNMC architect  
Scott Hunt, UNO planner  
Alison Topp, UNMC architect  
Lee McQueen, UNK engineer  
Chad Lea, UNL architect  
Dan Michalak, UNMC engineer  
Larry Morgan, UNO engineer  
Stefan Newbold, UNL engineer  
Mark Sjogren, UNMC architect  
Alan Wedige, UNK architect  
Brooke Hay, UNL engineer  
Brian Spencer, UNMC architect/planner  
Michael Tierney, UNMC architect

SPONSOR: Rebecca H. Koller  
Assistant Vice President for Business and Finance  
Director of Facilities Planning and Management

APPROVED: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-D-7  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Business Affairs Committee Approval of Intermediate Design Reports

RECOMMENDED ACTION: Report

PREVIOUS ACTION: November 7, 2008 - The Board of Regents approved revisions to RP-6.3.6.2.d authorizing the Business Affairs Committee to approve Intermediate Design for projects greater than \$2,000,000 and report approval to the Board at the next regular meeting. Approval of Intermediate Design fixes the project scope and budget.

EXPLANATION: Following is Intermediate Design Reports approved by the Business Affairs Committee (including the revised completion dates):

UNK – University Village Student Housing

Program Statement Approved: April 10, 2015  
Intermediate Design Report: March 18, 2016

	<i>Program Statement</i>	<i>Intermediate Design</i>
Total Project Budget:	\$16,000,000	\$16,000,000
Non Construction Budget:	\$1,872,635	\$2,000,000
Construction Budget:	\$14,127,365	\$14,000,000
NSF:	59,045	59,991
GSF:	77,691	77,655
Substantial Completion:	June 2017	July 2017

UNL – Library Depository Retrieval Facility Addition

Program Statement Approved: October 9, 2015  
Intermediate Design Report: March 18, 2016

	<i>Program Statement</i>	<i>Intermediate Design</i>
Total Project Budget:	\$4,216,000	\$4,216,000
Non Construction Budget:	\$485,680	\$523,900
Construction Budget:	\$3,730,320	\$3,692,100
NSF:	6,408	6,590
GSF:	7,900	8,900
Substantial Completion:	April 2017	May 2017

SPONSOR: Rebecca H. Koller  
Assistant Vice President for Business & Finance  
Director of Facilities Planning & Management

APPROVED: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016

TO: The Board of Regents Addendum VIII-D-8

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska at Kearney  
Report of Gifts, Grants, Contracts and Bequests accepted during the  
Quarter October 1, 2015 through December 31, 2015.

RECOMMENDED ACTION: Report

	Gifts A	Grants B	Bequests C	Contracts D	Totals
Description					
7/1/15-9/30/15	\$1,328,621	\$ 4,737,110	\$0	\$ 9,695	\$ 6,075,426
10/1/15-12/31/15	1,071,931	283,891	0	0	1,355,822
1/1/16-3/31/16	0	0	0	0	0
4/1/16-6/30/16	0	0	0	0	0
Fiscal YTD Totals	<u>\$2,400,552</u>	<u>\$ 5,021,001</u>	<u>\$0</u>	<u>\$ 9,695</u>	<u>\$ 7,431,248</u>
2014-15 Totals	<u>\$4,988,320</u>	<u>\$ 9,345,299</u>	<u>\$0</u>	<u>\$616,724</u>	<u>\$14,950,343</u>
2013-14 Totals	<u>\$2,977,844</u>	<u>\$ 9,812,292</u>	<u>\$0</u>	<u>\$18,6767</u>	<u>\$12,976,903</u>

A - Gifts of \$100,000 and more are itemized on the attached pages  
B - Grants of \$1,000,000 and more are itemized on the attached pages  
C - All bequests are itemized on the attached pages  
D - Contracts of \$400,000 and more are itemized on the attached pages

SPONSOR: Jane E. Sheldon  
Interim Vice Chancellor for Business and Finance

APPROVED: Douglas A. Kristensen, Chancellor  
University of Nebraska at Kearney

DATE: February 24, 2016

**UNIVERSITY OF NEBRASKA AT KEARNEY  
 REPORT OF AWARDS  
 WHICH REQUIRE SEPARATE ITEMIZATION  
 ACCEPTED DURING THE QUARTER October 1, 2015 through December 31, 2015**

Gifts/Bequests \$100,000 and over

<u>Donor</u>	<u>Purpose</u>	<u>Amount</u>
NU Foundation	NU Foundation Scholarships	\$ 922,846
	Subtotal	\$ 922,846
	Total amount of gifts under \$100,000	<u>149,085</u>
	Total Gifts for the Quarter	<u>\$1,071,931</u>

\*\*\*\*\*

Grants \$1,000,000 and over

<u>Grantor</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
		Subtotal	\$ 0
		Total amount of all Grants under \$1,000,000	<u>283,891</u>
		Total Grants for the Quarter	<u>\$ 283,891</u>

\*\*\*\*\*

Contracts \$400,000 and over

<u>Grantor</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
None		Subtotal	\$0
		Total amount of all Contracts under \$400,000	<u>0</u>
		Total Contracts for the Quarter	<u>\$0</u>



TO: The Board of Regents

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska-Lincoln  
Report of Gifts, Grants, Contracts and Bequests accepted during the  
Quarter October 1, 2015 through December 31, 2015

RECOMMENDED ACTION: Report

	A Gifts	B Grants	C Bequests	D Contracts	Totals
Description					
7/1/15-9/30/2015	\$303,049	\$72,524,549	\$0	\$5,573,422	\$78,401,020
10/1/15-12/31/2015	1,072,777	29,903,543	0	6,900,176	37,876,496
1/1/16-3/31/2016	0	0	0	0	0
4/1/16-6/30/2016	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Fiscal YTD Totals	<u>\$1,375,826</u>	<u>\$102,428,092</u>	<u>\$0</u>	<u>\$12,473,598</u>	<u>\$116,277,516</u>
2014-15 Totals	<u>\$124,386</u>	<u>\$193,900,160</u>	<u>\$0</u>	<u>\$24,018,784</u>	<u>\$218,043,330</u>
2013-14 Totals	<u>\$352,102</u>	<u>\$186,326,949</u>	<u>\$7,000</u>	<u>\$31,633,419</u>	<u>\$218,319,470</u>

A - Gifts of \$100,000 or more are itemized on the attached pages

B - Grants of \$1,000,000 and more are itemized on the attached pages

C - All bequests are itemized on the attached pages

D - Contracts of \$400,000 and more are itemized on the attached pages

SPONSOR: Prem S. Paul  
Vice Chancellor for Research & Economic Development

APPROVED: Harvey Perlman, Chancellor  
University of Nebraska-Lincoln

DATE: February 24, 2016

**UNIVERSITY OF NEBRASKA-LINCOLN  
 REPORT OF AWARDS  
 WHICH REQUIRE SEPARATE ITEMIZATION  
 ACCEPTED DURING THE QUARTER OCTOBER 1 – DECEMBER 31, 2015**

Gifts/Bequests \$100,000 and over

<u>Donor</u>	<u>Purpose</u>	<u>Amount</u>
En Pointe Technologies	Seagate StorSimple Appliance Model 8600 & 1 <sup>st</sup> Year Gold Support Plan	\$197,780
Roche Diagnostics Corporation	Symphony Staining System	125,000
	Subtotal	\$322,780
	Total amount of gifts under \$100,000	<u>749,997</u>
	Total Gifts for the Quarter	<u>\$1,072,777</u>

\*\*\*\*\*

Grants \$1,000,000 and over

<u>Grantor</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
NE Dept Health & Human Serv	Kathryn Olson Center on Children, Families and the Law	Training on Family and Policy Services	\$2,900,000
Sherwood Foundation/Lozier Foundation	William Lewis Center for Science, Mathematics & Computer Education	NebraskaMATH – Strengthening the OPS-UNL Partnership	1,038,910
Noyce Fdn/Univ of San Diego-CEPAL	Kathleen Lodl 4-H State Office	Click2Science 2015-2017	1,016,500
	Subtotal		\$4,955,410
	Total amount of all Grants under \$1,000,000		<u>24,948,133</u>
	Total Grants for the Quarter		<u>\$29,903,543</u>

\*\*\*\*\*

Contracts \$400,000 and over

<u>Grantor</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
Semiconductor Rsch Corp-Nanoelec Rsch Corp	Evgeny Tsybal Department of Physics and Astronomy	Center for Nanoferric Devices	\$1,500,000
Natl Strategic Rsch Inst (NSRI)	Laurence Rilett Department of Civil Engineering	Traffic Calming Elements for Entry Control Facility Threat Delay and Containment	953,654
	Subtotal		\$2,453,654
	Total amount of all Contracts under \$400,000		<u>4,446,522</u>
	Total Contracts for the Quarter		<u>\$6,900,176</u>

TO: The Board of Regents

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska Medical Center  
Report of Gifts, Grants, Contracts and Bequests Accepted During the  
Quarter October 1, 2015 through December 31, 2015

RECOMMENDED ACTION: Report

Description	A Gifts	B Grants	C Bequests	D Contracts	TOTAL
7/01/2015 - 9/30/2015	\$256,547	\$42,524,247	\$0	\$12,017,588	\$54,798,383
10/01/2015 - 12/31/2015	243,810	7,869,144	0	12,729,403	20,842,358
1/01/2016 - 3/31/2016	0	0	0	0	0
4/01/2016 - 6/30/2016	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Fiscal YTD Totals	<u>\$500,358</u>	<u>\$50,393,391</u>	<u>\$0</u>	<u>\$24,746,992</u>	<u>\$75,640,740</u>
2014-2015 Totals	<u>\$1,448,584</u>	<u>\$78,501,879</u>	<u>\$0</u>	<u>\$34,888,392</u>	<u>\$114,838,855</u>
2013-2014 Totals	<u>\$1,588,378</u>	<u>\$75,223,340</u>	<u>\$0</u>	<u>\$39,328,458</u>	<u>\$116,140,176</u>

A - Gifts of \$100,000 or more are itemized on the attached pages

B - Grants of \$1,000,000 or more are itemized on the attached pages

C - All bequests are itemized on the attached pages

D - Contracts of \$400,000 or more are itemized on the attached pages

SPONSOR: Jennifer L. Larsen  
Vice Chancellor of Research

APPROVED: Jeffrey P. Gold, Chancellor  
University of Nebraska Medical Center

DATE: February 24, 2016

**UNIVERSITY OF NEBRASKA MEDICAL CENTER  
REPORT OF AWARDS  
WHICH REQUIRE SEPARATE ITEMIZATION  
ACCEPTED DURING THE QUARTER OCTOBER 1 - DECEMBER 31, 2015**

Gifts/Bequests \$100,000 and over

<u>Donor</u>	<u>Purpose</u>	<u>Amount</u>
B. Munroe Foundation	PLAY/CAMP	\$131,300
	Subtotal	\$131,300
	Total amount of Gifts under \$100,000	<u>112,510</u>
	Total Gifts for the Quarter	<u>\$243,810</u>

\*\*\*\*\*

Grants \$1,000,000 and over

<u>Grantee</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
DHHS/NIH/NIGMS	MMI Developmental Neuroscience	The Molecular Biology of Neurosensory Systems [Main]	\$1,005,200
	Subtotal		\$1,005,200
	Total amount of Grants under \$1,000,000		<u>6,863,944</u>
	Total Grants for the Quarter		<u>\$7,869,144</u>

\*\*\*\*\*

Contracts \$400,000 and over

<u>Grantee</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
Emory University	COPH Epidemiology	National Ebola Training and Education Center	\$1,931,814
Merck Sharp & Dohme Corp.	Eppley Institute	Global Survey of Bloodstream Infections in High Risk Neutroneic Cancer Patients GRADE [Glycemic Reduction Approaches for Diabetes: A Comparative Effectiveness	1,048,672
George Washington University	Int Med DEM	Immunomics Unit Research	621,153
National Strategic Research Institute	Pathology/Microbiology	Support of USAMRIID Center for Genome Sciences (TO 0046) Identification of Stability Indicating Assays to Support Formulation Work: Product Characterization and Forced Degradation (Stage 1)	1,185,801
National Strategic Research Institute	Pathology/Microbiology	Capacity Building for Rapid Outbreak Detection and Response: Next Generation Sequence Training Module (NGSTM) for Global Biosurveillance Technology Initiative (TO 48)	423,505
National Strategic Research Institute	COPH Environ, Agri & Occ Health		505,770
	Subtotal		\$5,716,715

Total amount of Contracts under \$400,000	<u>7,012,688</u>
Total Contracts for the Quarter	<u>\$12,729,403</u>

TO: The Board of Regents

Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: University of Nebraska at Omaha  
Report of Gifts, Grants, Contracts and Bequests accepted during the  
Quarter October 1, 2015 through December 31, 2015.

RECOMMENDED ACTION: Report

	Gifts A	Grants B	Bequests C	Contracts D	Totals
Description					
7/1/15-9/30/2015	\$1,553,696	\$10,408,346	\$59,333	\$1,418,467	\$13,439,842
10/1/15-12/31/2015	3,491,571	5,221,596	0	272,777	8,985,944
1/1/16-3/31/2016	0	0	0	0	0
4/1/16-6/30/2016	0	0	0	0	0
Fiscal YTD Totals	<u>\$5,045,267</u>	<u>\$15,629,942</u>	<u>\$59,333</u>	<u>\$1,691,244</u>	<u>\$22,425,786</u>
2014-2015 Totals	<u>\$6,790,816</u>	<u>\$35,673,562</u>	<u>\$10,302</u>	<u>\$1,485,533</u>	<u>\$43,960,214</u>
2013-2014 Totals	<u>\$6,153,674</u>	<u>\$32,757,715</u>	<u>\$17,222</u>	<u>\$1,112,733</u>	<u>\$40,041,345</u>

A - Gifts of \$100,000 and more are itemized on the attached pages  
B - Grants of \$1,000,000 and more are itemized on the attached pages  
C - All bequests are itemized on the attached pages  
D - Contracts of \$400,000 and more are itemized on the attached pages

SPONSOR: William E. Conley  
Vice Chancellor for Business and Finance

APPROVED: John E. Christensen, Chancellor  
University of Nebraska at Omaha

DATE: February 24, 2016

**UNIVERSITY OF NEBRASKA AT OMAHA  
 REPORT OF AWARDS  
 WHICH REQUIRE SEPARATE ITEMIZATION  
 ACCEPTED DURING THE QUARTER OCTOBER 1 – DECEMBER 31, 2015**

Gifts \$100,000 and over

<u>Donor</u>	<u>Purpose</u>	<u>Amount</u>
NU Foundation	Glacier Creek North Tract Purchase	\$350,000
NU Foundation	Glacier Creek West Watershed	386,276
NU Foundation	Professorships First Semester	268,751
NU Foundation	Scholarships First Semester	1,474,285
	Subtotal	\$2,479,312
	Total amount of gifts under \$100,000	<u>1,012,259</u>
	Total Gifts for the Quarter	<u>\$3,491,571</u>

\*\*\*\*\*

Grants \$1,000,000 and over

<u>Grantor</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
			\$0
		Subtotal	\$0
		Total amount of all Grants under \$1,000,000	<u>5,221,596</u>
		Total Grants for the Quarter	<u>\$5,221,596</u>

\*\*\*\*\*

Bequests

<u>Donor</u>	<u>Purpose</u>	<u>Amount</u>
		\$0
	Subtotal	<u>0</u>
	Total Bequests for the Quarter	<u>\$0</u>

\*\*\*\*\*

Contracts \$400,000 and over

<u>Grantor</u>	<u>Grantee Department</u>	<u>Purpose</u>	<u>Amount</u>
			\$0
		Subtotal	\$0
		Total amount of all Contracts under \$400,000	<u>272,777</u>
		Total Contracts for the Quarter	<u>\$272,777</u>

TO: The Board of Regents Addendum VIII-D-9  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Report of Bids and Contracts

RECOMMENDED ACTION: Report

PREVIOUS ACTION: None

EXPLANATION: The attached report is a summary of bids and contracts as provided by the campuses pursuant to Section 6.4 of the *Bylaws of the Board of Regents of the University of Nebraska* for the period ended February 24, 2016.

The report outlines the following: type of action; campus; description and use of the product, service, or project; funding source; approved budget amount; contract amount; contractor or vendor; and a bid review or bid explanation if the low responsible bid was not accepted.

SPONSOR: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016



<b>Type of Action</b>	<b>Campus</b>	<b>Description</b>	<b>Funding Source</b>	<b>Approved Budget Amount*</b>	<b>Contract Amount</b>	<b>Contractor / Vendor</b>	<b>Bid Review or Explanation</b>
Construction Contract	UNO	Criss Library Limited Remodel	Revolving Funds	\$500,000	\$391,770	Hawkins Construction	Lowest Responsible Bid
Design/Build Contract	UNO	Pacific Campus Parking Structure	Revenue Bonds Funds, Bond Surplus Funds and Revolving Funds	28,874,160	26,747,000	Sampson Construction	Design/Build Selection Process
Electronic Equipment	UNMC	Multi-Taction Wall for iEXCEL-Expo in Sorrell Center	Cash	398,724	398,724	AVI-SPL	Approved Unique Non-Competitive Equipment-Cooperative Pricing
Property	UNL	Purchase of research plot combine by Agronomy Research Farm, Havelock	Revolving Funds	293,854	293,854	Almaco Manufacturing	Sole source – this company is superior in their data collection system and software retrieval of data specific to individual plots and conditions in soybean breeding research.
Research Equipment	UNMC	Lyophilizer for NE Nanomedicine Production Plant-Dept of Pharmacology and Experimental Neuroscience	Cash	395,000	395,000	SP Scientific	Approved Unique Non-Competitive Equipment Purchase

\*Approved budget amount for construction contracts represents the entirety of the project budget, whereas the contract amount is the amount pertaining to the particular activity within the construction contract.

TO: The Board of Regents Addendum VIII-D-10  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Semi-Annual Report of Licenses

RECOMMENDED ACTION: Report

EXPLANATION: The attached report is a summary of licenses as provided by the campuses pursuant to Regents Policy RP-6.3.1.4.v (2) of the Board of Regents of the University of Nebraska for the period.

The report outlines the following: type of action; campus; description and use of the product, service, or project; term of the license; and financial terms of the license.

APPROVED: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016

**SEMI-ANNUAL REPORT OF LICENSES  
7/1/2015 THROUGH 12/31/2015**

<b>Type of Action</b>	<b>Campus</b>	<b>Licensee</b>	<b>Description of Product/Service</b>	<b>Term of License</b>	<b>Contractual Requirements</b>
Intellectual Property License (Exclusive)	UNMC	Prommune, Inc	EP67 Peptide	Life of Patents	Royalty bearing, Minimum Royalties, Equity
Copyright (Non-Exclusive)	UNMC	Anatamage	Educational Images	Perpetuity	Significant Product Discounts
Intellectual Property Option	UNMC	Medbiotic	Anti-microbial Peptides	6 months	Patent Cost Reimbursement
Intellectual Property License (Exclusive)	UNMC	Trak	Orthopedic Surgical System	Life of Patents	Royalty bearing, Minimum Royalties, Patent Cost Reimbursement, Equity
Intellectual Property License (Exclusive)	UNMC	H4	Pressure Ulcer Matrix	Life of Copyrights	Royalty bearing
Research Tools License (Non-Exclusive)	UNMC	EMD Millipore Corporation	Antibodies	15 years	License fee, Royalty bearing
Intellectual Property License (Option)	UNMC	GLG Pharma	MDSC Inhibition	3 month	Technology diligence

Intellectual Property License (Option)	UNMC	Biocare Medical, LLC	Biomarkers	6 months	License fee
Intellectual Property License (Exclusive)	UNMC	Calidum	Targeted Radiopharmaceuticals	Life of Patents	Royalty bearing, Minimum Royalties, Patent Cost Reimbursement, Equity
Intellectual Property License (Exclusive)	UNMC	Atrium Medical Corporation	Pleuraleak Air Lead Detection System	Life of Patents	License fee, Royalty bearing, Minimum Royalties, Patent Cost Reimbursement
Intellectual Property License- (Exclusive)	UNL	Confidential Business information (CBI)	English Language Learning Book	7 years	License Fee
Germplasm License (Non-exclusive)	UNL	CBI	Plant Variety - Wheat	10 years	Royalty Bearing
Research License (Non – exclusive)	UNL	CBI	Fluoride salts for insecticide development	2 years	Yearly Fee
Intellectual Property Option Agreement (Exclusive)	UNL	CBI	Drone technology and applications	12 months	Start-up standstill

Germplasm License (Non-exclusive)	UNL	CBI	Plant Variety - Triticale	7 years	Royalty Bearing
Intellectual Property Option Agreement (Exclusive)	UNL	CBI	Prebiotics for nutraceutical use	9 months	License Fee
Research Only License (Non – exclusive)	UNL	CBI	Solar energy technology	12 months	To be negotiated
Intellectual Property Option Agreement (Exclusive)	UNL	CBI	Therapeutic and diagnostic delivery technology	8 months	Start-up standstill
Germplasm License (Non-exclusive)	UNL	CBI	Plant Variety - Triticale	10 years	Royalty Bearing

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Financial Aid Strategic Framework Accountability Measure Results

RECOMMENDED ACTION: Report

PREVIOUS ACTION: September 19, 2014 – Strategic Framework Financial Aid presentation was made before the Board of Regents

EXPLANATION: This year the presentation was made to the Academic Affairs Committee on February 25, 2016.  
  
The latest results for the need and merit-based accountability measures were once again met. (See attached.)

SPONSOR: Kristin E. Yates  
Assistant Vice President and Director of Institutional Research

APPROVED: Susan Fritz  
Executive Vice President and Provost

DATE: February 29, 2016

# Need-Based Aid Accountability Measure

1. The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate and professional education.
  - a. Maintain an affordable cost of education.
    - iii. Increase support for need-based financial aid.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2014-15	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 2016	Academic Affairs

# Merit-Based Aid Accountability Measure

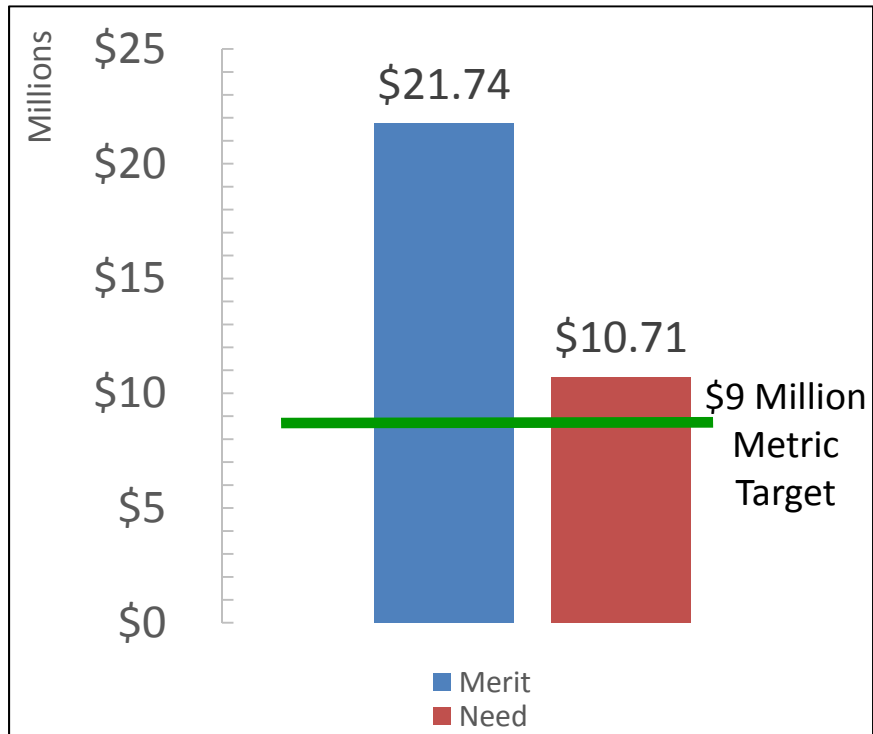
- 3. The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector and other educational institutions.
  - b. Increase proportion of Nebraska high school students ranking in the top 25 percent of their classes that attend the University of Nebraska.

*ii. Increase support for merit-based aid*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2014-15	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 2016	Academic Affairs



# Foundation Merit and Need-Based Aid FY 2015



## Results

- The merit-based target was successfully met
- The need-based target was successfully met

# Financial Aid Accountability Measures

1. The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate and professional education.
  - a. Maintain an affordable cost of education.
  - iii. *Increase support for need-based financial aid.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2015-16	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 2017	Academic Affairs

3. The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector and other educational institutions.
  - b. Increase the portion of students in the top 25 percent of their Nebraska high school class.
  - ii. *Increase support for merit-based aid.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
FY 2015-16	Raise at least \$9 million in private funds (endowment and/or spendable).	Jan. 201	Academic Affairs

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Results for the Strategic Framework Graduation Rate  
Accountability Measures

RECOMMENDED ACTION: Report

PREVIOUS ACTION: January 30, 2015 – Strategic Framework Graduation Rate  
presentation was made before the Board of Regents

EXPLANATION: This year the presentation was made to the Academic Affairs  
Committee on February 25, 2016.  
  
The latest results for the graduation rate accountability measures  
are in the attached sheets.

SPONSOR: Kristin E. Yates  
Assistant Vice President and Director of Institutional Research

APPROVED: Susan Fritz  
Executive Vice President and Provost

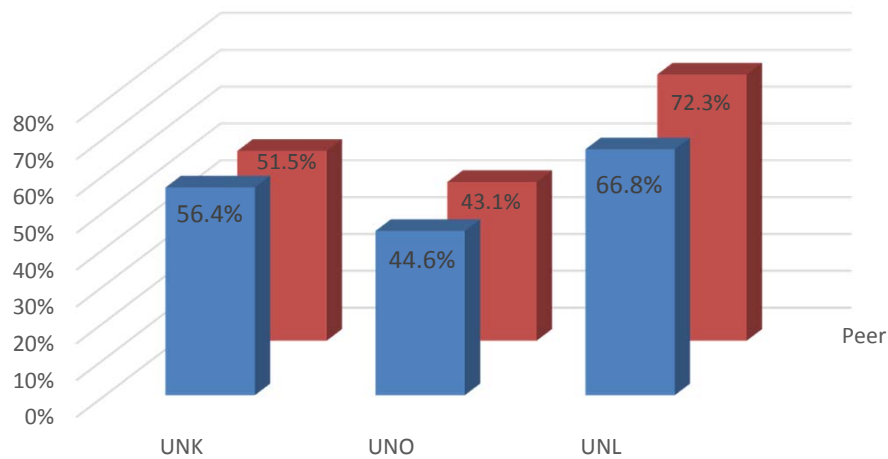
DATE: February 29, 2016

# Graduation Rates Accountability Measure

1. The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate and professional education
  - b. Increase the percentage of Nebraska high school graduates...who enroll at and graduate from the university.
    - iii. Increase each campus's undergraduate six-year graduation rate, with a goal of exceeding the average of its peer institutions*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
AY 2013-14	1) Each campus will maintain or reach the average six-year graduation rate of its peers.	Feb. 2016	Academic Affairs

# Campus and Peer Six-Year Graduation Rate



- Calculation based on a cohort of first-time, degree-seeking freshmen students, who enroll full-time the first semester
- Reporting on freshmen cohort of fall 2008 that graduated by the summer of 2014
- UNK and UNO exceeded the metric; UNL did not

# Graduation Rates Accountability Measure

1. The University of Nebraska will provide the opportunity for Nebraskans to enjoy a better life through access to high quality, affordable undergraduate, graduate and professional education
  - b. Increase the percentage of Nebraska high school graduates...who enroll at and graduate from the university.
    - iii. Increase each campus's undergraduate six-year graduation rate, with a goal of exceeding the average of its peer institutions*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
AY 2014-15	1) Each campus will maintain or reach the average six-year graduation rate of its peers.	Jan. 2017	Academic Affairs

TO: The Board of Regents  
Academic Affairs Committee

MEETING DATE: March 18, 2016

SUBJECT: Strategic Framework Report on Entrepreneurship

RECOMMENDED ACTION: Report

PREVIOUS ACTION: April 10, 2015 – A report on entrepreneurship was provided to the Board of Regents.

EXPLANATION: This report is on the accountability measures for the Strategic Framework goal 13, “Entrepreneurship, support entrepreneurship education, training and outreach.”

Based upon input by NU entrepreneurship faculty and staff and the recommendation of the Academic Affairs Committee, the entrepreneurship accountability measure was modified to focus on entrepreneurship education, entrepreneurship outreach, business creation and business support.

Surveys were sent out to participants that reflected the change in the metric. The compiled data is the latest available from the University entrepreneurship programs and covers July 1, 2014 through June 30, 2015. The values reported in these areas establish the baseline for the subsequent year’s target.

SPONSOR: Susan M. Fritz  
Executive Vice President and Provost

APPROVED: Hank M. Bounds, President  
University of Nebraska

DATE: February 26, 2016

# Strategic Framework 5-d

## Support entrepreneurship education, training and outreach

- The goal for this reporting date was to establish baseline numbers in the following categories:
  - I. Entrepreneurship education
    - Formal coursework hours delivered
    - Number of students
  - II. Entrepreneurship outreach
    - Seminars provided
    - Website visits
  - III. Business Creation
    - NU-affiliated companies formed
    - NU licensing activity
  - IV. Business support
    - Clients served
    - Investments by clients in their businesses
    - Increase in sales by clients
    - Decrease in operating (savings) by clients
    - Jobs created and saved
- Based on the data collected, the future goal is to increase numbers from the previous year, evaluating and adjusting targets as appropriate.



# Results for 2015 Reporting Period

## Entrepreneurship Education:

<u>2014</u>	<u>2015</u>		<u>2014</u>	<u>2015</u>
2,199	2,652	Undergraduate Students	6,440	7,956 Credit hours
93	139	Graduate Students	371	485 Credit hours

## Entrepreneurship Outreach Seminars:

<u>Seminar duration</u>	<u>Number of Attendees</u>	
	<u>2014</u>	<u>2015</u>
1 hr.	7,056	6,537
2 hrs.	1,926	2,424
8 hrs.	1,446	716
1 day	65	566
2 days	555	411
More than 2 days	5,438	1,659

Website visits:	<u>2014</u>	<u>2015</u>
	205,266	152,485

## Results for 2015 Reporting Period, cont.

### Business Creation

	<u>2014</u>	<u>2015</u>
a) NU-affiliated companies formed:	11	26
b) NU licensing activity		
Patents disclosed:	164	166
Patents filed:	200	206
Patents awarded:	38	43

### Business Support

Clients served:	9,542	8,837
Average investment:	\$45,000	\$200,079
Average sales increase:	\$64,000	\$85,843
Total jobs created:	951	451
Total jobs saved:	295	1173

TO: The Board of Regents  
Academic Affairs

MEETING DATE: March 18, 2016

SUBJECT: Strategic Framework report on Workforce Opportunities and Academic Program Alignment

RECOMMENDED ACTION: Report

PREVIOUS ACTION: April 10, 2015 – An updated Workforce Opportunities and Academic Program Alignment report was provided to the Board of Regents

EXPLANATION: In 2005, the University of Nebraska analyzed 16 studies of workforce needs in the State of Nebraska and compiled a list of the six major categories for development. They are Business Marketing and Management; Communication and Information Systems; Environmental and Agricultural Systems; Health Sciences; Human Sciences; and Industrial, Manufacturing and Engineering Systems. Within each of these six broad employment categories, the NU campuses provide numerous instructional programs to prepare the Nebraska workforce. In November 2006, the outcome of this research was presented to the Board of Regents and we began indexing all existing academic programs that directly addressed jobs in these six areas. In subsequent years, NU has updated the indexed list by adding new instructional programs to meet workforce needs.

This report lists the six major areas and provides a list of NU degree and certificate programs currently in place or under development.

New programs that have been added this year are highlighted in purple and new programs under development are highlighted in yellow.

APPROVED: Susan M. Fritz  
Executive Vice President and Provost

DATE: February 26, 2016

## Accountability Measure:

### 3. The University of Nebraska will play a critical role in building a talented, competitive workforce and knowledge-based economy in Nebraska in partnership with the state, private sector and other educational institutions.

- h. Pursue excellence in educational attainment aligned with the long-term interests of the state.
  - i. *Analyze areas of future workforce demand, including job and self-employment opportunities in non-growth rural communities and economically disadvantaged urban areas, and strengthen or develop curricula and programs appropriate to the university in alignment with those areas.*
  - iii. *Develop distance education and other educational programs that permit Nebraskans to prepare for jobs and opportunities to meet future workforce demands.*

Reporting Period	Accountability Measure	Report Date	Reporting Committee
Fall 2015	Address program alignment revisions to meet workforce needs based on Fall 2011 data.	March 2016	Academic
Fall 2016	Address program alignment revisions to meet workforce needs based on Fall 2011 data.	April 2017	Academic
Fall 2017	TBD	March 2018	Academic

In 2005, the University of Nebraska analyzed 16 studies of workforce needs in the State of Nebraska and compiled a list of the six major categories for development. They are Business Marketing and Management; Communication and Information Systems; Environmental and Agricultural Systems; Health Sciences; Human Sciences; and Industrial, Manufacturing and Engineering Systems. Within each of these six broad employment categories, the NU campuses provide numerous instructional programs to prepare the Nebraska workforce. In November 2006, the outcome of this research was presented to the Board of Regents and we began indexing all existing academic programs that directly addressed jobs in these six areas. In subsequent years, NU has updated the progress by adding new instructional programs to meet workforce needs.

This report lists the six major areas and provides a list of NU degree or certificate programs currently in place or in development.

New programs that have been added this year are highlighted in purple and new programs in development are highlighted in yellow.

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Business Marketing and Management</b>			
<b>Administration, Finance, Sales</b>			
UNK			
	Business Administration (BS/MBA) Chemistry, Business/Sales Emphasis (BS) Professional Sales (Undergraduate Certificate)		Business Intelligence (Undergraduate Certificate)
UNL			
	Accountancy (MPA/JD-MPA) Agribusiness (BS/MBA) Agricultural Economics (BS/MS/PhD) Business (MA with Global Leadership emphasis) Business Administration (BS/MA/MBA) Business Administration (MBA with Executive Leadership specialization) Business Administration with a Major in Supply Chain Management (BS) Business Analytics (Graduate Certificate) Economics (BA/BS/MA/PhD) Finance (BS/MA) Management (BS) Marketing (BS)		
UNO			
	Accounting (BSBA/MAcc) Business Administration-Executive (MBE) Business Administration (MBA) Economics (BSBA/BGS/MA/MS) Management (BSBA) Marketing (BSBA) Real Estate and Land Use Economics-Real Estate Certification (BSBA/MS)	Center for Collaboration Science Center for Real Estate and Asset Management Center for Urban Sustainability	

<b>Business Marketing and Management</b>			
<b>Business Services</b>			
UNK			
	Business Administration (BS)		
UNL			
	Accounting (BS) Actuarial Science (BA/BS/MA/PhD) Agribusiness (BS/MBA) Agricultural Economics (BS/MS/PhD) Applied Science (BS/MAS) Business Administration with a Major in Supply Chain Management (BS) Business Analytics (Graduate Certificate) Hospitality, Restaurant, and Tourism Management (BA) Management (BS) Management Information Systems (MA) Marketing (BS) Psychology (JD-PhD/PhD with UNO) Supply Chain Management Systems (Graduate Certificate) Textiles, Merchandising, and Fashion Design (BS/MA/MS)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Business Marketing and Management</b>			
<b>Business Services (continued)</b>			
UNO	Accounting (BSBA/MAcc) Business Administration (BSBA/MS/MBA) Business Administration, Supply Chain Management concentration (BSBA) Data Analytics (Graduate Certificate) Economics (BSBA) Human Resources, Training, and Development (Graduate Certificate) Industrial and Organizational Psychology (MS) Management (BSBA) Marketing (BSBA) Mathematics, Data Science concentration (MS) Psychology - Industrial and Organizational Psychology (MA) Psychology (PhD) (with UNL) Real Estate and Land Use Economics-Real Estate Certification (BSBA)	Center for Economic Education Center for Real Estate and Asset Management Center for Urban Sustainability Nebraska Business Development Center	Data Science and Analytics (MS)
<b>Business Marketing and Management</b>			
<b>Entrepreneurship</b>			
UNK	Business Administration (BS) Chemistry, Business/Sales Emphasis (BS) Exercise Science Management (BS) Journalism Advertising (BA/BS) Journalism Public Relations (BA/BS) Multimedia (BA/BS) Organizational Communication (BS) Professional Sales (Undergraduate Certificate) Recreation, Park and Tourism Management (Travel and Tourism option) (BS) Sports Administration (BS) Visual Communication and Design (BFA)		
UNL	Applied Science (BS/MAS) Business Administration (MBA) Business Analytics (Graduate Certificate) Hospitality, Restaurant, and Tourism Management (BA) Human Sciences (with a specialization in Textiles, Merchandising, and Fashion Design and an option in Merchandising) (PhD) Integrated Science (BS) Management (BS) Textiles, Merchandising, and Fashion Design (BS/MA/MS)		
UNO	Innovation & Entrepreneurship (BSBA)	Center for Innovation, Entrepreneurship and Franchising Center for Urban Sustainability	Data Science and Analytics (MS)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Business Marketing and Management</b>			
<b>Financial Services</b>			
UNK	Applied Computer Science (BS) Business Administration (BS) Computer Information Systems Comprehensive (BS)		
UNL	Accounting (BS/MPA/JD-MPA) Agribusiness (BS/MBA) Agricultural Economics (BS/MS/PhD) Economics (BA/BS/MA/PhD) Family and Consumer Sciences (with Family Financial Planning option) (MS) Finance (BS) Financial and Housing Counseling (Graduate Certificate)		
UNO	Accounting (BSBA/MAcc) Economics (MA/MS) Finance (BSBA) Investment Science Portfolio Management (BSBA) Management Information Systems (BGS/BSIS/MS)		

<b>Business Marketing and Management</b>			
<b>Public Service and Administration</b>			
UNK	Applied Computer Science (BS) Aviation Systems Management (BS) Computer Information Systems (BS) Political Science (BA/BS) Public Administration (BS) Social Science Comprehensive (BA) Social Work (BS)		
UNL	Applied Science (MAS) (Community Development specialization) Civic Engagement (Undergraduate Certificate) Communication Studies (BA/BS/PhD) Community and Regional Planning (Master/JD-MCRP) Computer Science (BS/MS/PhD) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Financial and Housing Counseling (Graduate Certificate) Human Sciences (Leadership Studies specialization) (PhD) Human Sciences (PhD/EdD) Juris Doctorate (at UNL) and Public Health (MPA at UNMC) (Dual Degree Program) Leadership Education (MS) Political Science (BA/BS/MA/PhD) Psychology (BA/BS/MA/PhD) Public Policy (Undergraduate Certificate) Sociology (BA/BS/MA/PhD)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	<b>Academic Programs</b>	<b>Related Programs</b>	<b>Programs Under Development</b>
<b>Business Marketing and Management</b>			
<b>Public Service and Administration (continued)</b>			
UNMC	Biostatistics (PhD) Business Administration (MBA at UNO) and Public Health (MPH at UNMC) (Dual Degree Program) Community Oriented Primary Care (Professional Certificate) Emergency Preparedness (MS) Emergency Preparedness (Professional Certificate) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Epidemiology (PhD) Health Promotion and Disease Prevention Research (PhD) Health Services Research, Administration and Policy (PhD) Infectious Disease Epidemiology (Professional Certificate) Juris Doctorate (at UNL) and Public Health (MPA at UNMC) (Dual Degree Program) Maternal and Child Health (Professional Certificate) Public Health (MPH/Professional Certificate)	Center for Health Policy Center for Reducing Health Disparities	Center for Patient, Family, and Community Engagement in Chronic Care Management
UNO	American Government (Graduate Certificate) Aviation (BGS/BS) Business Administration (MBA at UNO) and Public Health (MPH at UNMC) (Dual Degree Program) Business for Bioscientists (Graduate Certificate) Economics (BSBA/MA/MS) Emergency Management (BS) General Administration, General Studies concentration (BGS) Nonprofit Administration, General Studies concentration (BGS) Political Science (BA/BS/MA/MS) Public Administration (MPA/PhD) Public Health (BS) Public Management (Graduate Certificate) Sociology (BS)	Center for Public Affairs Research Certified Public Manager Nebraska Municipal Clerk Institute and Academy	Center for Human Rights Gender and Leadership (Undergraduate Certificate)
<b>Communication and Information Systems</b>			
<b>Arts, AV Technology, and Communication</b>			
UNK	Applied Computer Science (BS) Computer Information Systems Comprehensive (BS) Computer Science Comprehensive (BS) Geography Spatial/GIS Option (BS) Multimedia (BA/BS) Software Quality Assurance (Undergraduate Certificate) Visual Communications and Design (BFA)		Business Intelligence (Undergraduate Certificate)



**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Communication and Information Systems</b>			
<b>Arts, AV Technology, and Communication (continued)</b>			
UNL	Agricultural & Environmental Sciences Communication (BS) Art History (MA) Communication Studies (BA/BS/MA/PhD) Computer Science (BA/BS/MA/PhD) Film Studies (BA/BS) Integrated Science (BS) Quilt Studies (Graduate Certificate) Teaching of Writing (Graduate Certificate)		Software Engineering (BS)
UNO	Art, General Studies concentration (BGS) Art History (BAAH) Communication (BGS/MA) Communication Studies (BAC/BSC) Computer Science (MS) Critical and Creative Thinking (MA) Journalism and Media Communication (BAC/BSC) Studio Art (BASA/BFA) Technical Communication (Graduate Certificate)		Intermedia (MFA and Graduate Certificate)

<b>Communication and Information Systems</b>			
<b>Information Services</b>			
UNK	Business Administration, Emphasis Management Information Systems (BS) Computer Information Systems Comprehensive (BS) Computer Science Comprehensive (BS) Geography Spatial/GIS Option (BS) Software Quality Assurance (Undergraduate Certificate) Telecommunications Management (BS)		Business Intelligence (Undergraduate Certificate)
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Computer Engineering (BS) Computer Science (BS/MS/PhD) Computer Science and Management (J.D. Edwards Honors Program) Electronics Engineering (BS) Engineering Management (MEM) Integrated Science (BS) Management (BS) Management Information Systems (MA) Mechanized Systems Management (BS/MS) Natural Resource Sciences (MS/PhD) Space Law Executive Certificate Statistics (MS/PhD)		Software Engineering (BS)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	<b>Academic Programs</b>	<b>Related Programs</b>	<b>Programs Under Development</b>
<b>Communication and Information Systems</b>			
<b>Information Services (continued)</b>			
UNO	Communication Studies (BA/BS) Computer Science (BS/BGS/MS) Computer Science-Artificial Intelligence (Graduate Certificate) Computer Science-Communications Network (Graduate Certificate) Computer Science-Software Engineering (Graduate Certificate) Computer Science-Systems and Architecture (Graduate Certificate) Critical and Creative Thinking (MA) Data Analytics (Graduate Certificate) Data Management (Undergraduate Certificate) Information Assurance (BS/MS) Information Technology (Executive MS) Information Technology Administration (Undergraduate Certificate) International Studies (BA) IT Innovation (BS) Library Media (BSED) Library Science, General Studies concentration (BGS) Management Information Systems (BGS/BS) MIS-Information Assurance (Graduate Certificate) MIS-Project Management (Graduate Certificate) MIS-Systems Analysis and Design (Graduate Certificate) Systems Development (Undergraduate Certificate)	Center for Urban Sustainability Geographic Information Systems Nebraska University Center for Information Assurance	Data Science and Analytics (MS) Intermedia (MFA and Graduate Certificate)

	<b>Academic Programs</b>	<b>Related Programs</b>	<b>Programs Under Development</b>
<b>Communication and Information Systems</b>			
<b>Information Technology</b>			
UNK	Applied Computer Science (BS) Computer Information Systems (BS) Computer Science Comprehensive (BS) Geography Spatial/GIS Option (BS) Software Quality Assurance (Undergraduate Certificate)		
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural and Environmental Sciences Communication (BS) Agricultural Engineering (BS) Agronomy (MS/PhD) Animal Science (MS/PhD) Applied Science (BS/MAS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Systems Engineering (BS) Computer Engineering (BS/MS) Computer Science (BA/BS/MA/PhD) Computer Science and Management (J.D. Edwards Honors Program) Food Science and Technology (MS/PhD) Integrated Science (BS) Mechanized Systems Management (BS/MS) Natural Resource Sciences (MS/PhD) Telecommunications Engineering (MS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD) Computer Engineering (PhD) Software Engineering (BS)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Communication and Information Systems</b>			
<b>Information Technology (continued)</b>			
UNMC			
	Biomedical Informatics (with UNO) (MS/PhD) Pathology/Microbiology (Bioinformatics track) (MS/ PhD)	Consumer Health Information Programs for Nebraskans Interprofessional Experiential Center for Enduring Learning (with UNO, UNL, UNK, and Nebraska Medicine) Robotics Initiatives Simulation Center UNeTecH: <i>Nebraska's Biomedical Technology Institute</i> (formerly Nebraska Advanced Biomedical Technology Innovation and Discovery Institute) (with UNO)	
UNO			
	Bioinformatics (BS) Biomechanics (BS) Biomedical Informatics (MS/PhD) (with UNMC) Computer Science (BS/BGS/MS) Information Assurance (MS) Information Technology (BGS/MS/PhD) Information Technology (Executive MS) Information Technology Administration (Undergraduate Certificate) Management Information Systems (BGS/BS/MS)	Center for Research in Human Movement Variability UNeTecH: <i>Nebraska's Biomedical Technology Institute</i> (formerly Nebraska Advanced Biomedical Technology Innovation and Discovery Institute) (with UNMC)	

<b>Communication and Information Systems</b>			
<b>Software</b>			
UNK			
	Applied Computer Science (BS) Computer Information Systems Comprehensive (BS) Computer Science Comprehensive (BS) Geography Spatial/GIS Option (BS) Software Quality Assurance (Undergraduate Certificate)		
UNL			
	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Communication Studies (BA/BS/PhD) Computer Engineering (BS/MS) Computer Science (BA/BS/MA/PhD) Management (Management Information Systems) (BS) Mechanized Systems Management (BS/MS) Statistics (MS/PhD)		Computer Engineering (PhD) Software Engineering (BS)
UNO			
	Computer Science (BS/BGS/MS) Information Technology (Executive MS) Management Information Systems (BGS/BS/MS)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Communication and Information Systems</b>			
<b>Transportation, Distribution, Warehousing, and Logistics</b>			
UNK	Aviation Systems Management (BS) Business Administration, Supply Chain Management Emphasis (BS) Geography Spatial/GIS Option (BS) Industrial Distribution (BS) Supply Chain Management (Undergraduate Certificate)		
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Engineering Management (MEM) Manufacturing Engineering (MS) Mechanized Systems Management (BS/MS) Supply Chain Management Systems (Graduate Certificate)		
UNO	Aviation (BS/BGS) Public Administration (MPA)		

**Environmental and Agricultural Systems**

<b>Animal Systems</b>			
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural and Environmental Sciences Communication (BS) Agricultural Engineering (BS) Animal Science (BS/MS/PhD) Applied Science (BS/MAS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Sciences (BS/MS/PhD) Biological Systems Engineering (BS) Entomology (MS/PhD) Environmental Restoration Science (BS) Fisheries and Wildlife (BS) Food Safety and Defense (Graduate Certificate) Food Science and Technology (MS/PhD) Food Technology for Companion Animals (BS) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Integrated Science (BS) Insect Science (BS) Integrative Biomedical Sciences (PhD) Mechanized System Management (BS/MS) Microbiology (BS) Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Nebraska Beef Industry Scholars (Undergraduate Certificate)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	<b>Academic Programs</b>	<b>Related Programs</b>	<b>Programs Under Development</b>
<b>Environmental and Agricultural Systems</b>			
<b>Animal Systems (continued)</b>			
UNL (continued)			
	Veterinary Medicine (DVM cooperative program with Iowa State University) Veterinary Science (BS) Veterinary Technology (BS) Water Science (BS)		
NCTA			
	Agricultural Production Systems (AAS/AS/Undergraduate Certificate) Equine Training Management (Undergraduate Certificate) Meat Culinology (Undergraduate Certificate) Veterinary Technology Systems (AAS/AS)		Feedlot Operations (Undergraduate Certificate) Laboratory Animal Care (Undergraduate Certificate)

<b>Environmental and Agricultural Systems</b>			
<b>Agriculture, Food, Natural Resources</b>			
UNK			
	Biology (MS) Biology, Wildlife Emphasis (BS) Chemistry Comprehensive, Environmental/Ag (BS) Geography Spatial/GIS Option (BS) Geography, Environmental Emphasis (BS)		
UNL			
	Agricultural and Biological Systems Engineering (MS) Agricultural and Environmental Sciences Communication (BS) Agricultural Engineering (BS) Agronomy (BS/MS/PhD) Animal Science (BS/MS/PhD) Applied Climate Science (BS) Applied Science (BS/MAS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Sciences (BS/MS/PhD) Biological Systems Engineering (BS) Entomology (MS/PhD) Environmental Restoration Science (BS) Environmental Studies (BA/BS) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Fisheries and Wildlife (BS) Food Safety and Defense (Graduate Certificate) Food Science (BS/MS/PhD) Food Technology for Companion Animals (BS) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Horticulture (BS/MS) Insect Science (BS) Integrated Science (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Environmental and Agricultural Systems</b>			
<b>Agriculture, Food, Natural Resources (continued)</b>			
UNL (continued)			
	Mechanized Systems Management (BS/MS) Meteorology and Climatology (BS) Microbiology (BS) Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Nebraska Beef Industry Scholars (Undergraduate Certificate) Plant Biology (BS) Plant Health (Doctor) Toxicology (PhD) (Joint with UNMC) Turfgrass and Landscape Management (BS) Veterinary Medicine (DVM cooperative program with Iowa State University) Veterinary Science (BS) Veterinary Technology (BS) Water Science (BS)		
UNMC			
	Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Toxicology (PhD) (Joint with UNMC)	Center for Environmental Toxicology Center for Human Nutrition	
UNO			
	Biology (BA/BS/BGS) Environmental Studies, General Studies concentration (BGS) Sustainability, General Studies concentration (BGS)		Translational Biology (PhD)
NCTA			
	Agricultural Production Systems (AAS/AS/Undergraduate Certificate)		

<b>Environmental and Agricultural Systems</b>			
<b>Agribusiness</b>			
UNK			
	Agribusiness (BS) Biology (BS) Chemistry, Environmental/Ag Emphasis (BS) Geography, Environmental Emphasis (BS) Geography, Spatial/GIS Emphasis (BS)		
UNL			
	Advanced Horticulture (Graduate Certificate) Agribusiness (BS/MS/MBA) Agricultural Economics (BS/MS/PhD) Agricultural Education (BS) Agricultural Engineering (BS) Agronomy (BS/MS) Agronomy and Horticulture (PhD) Animal Science (BS/MS/PhD) Applied Climate Science (BS) Applied Science (BS/MAS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	<b>Academic Programs</b>	<b>Related Programs</b>	<b>Programs Under Development</b>
<b>Environmental and Agricultural Systems</b>			
<b>Agribusiness (continued)</b>			
	UNL (continued)		
	Biological Systems Engineering (BS/MS) Entomology (MS/PhD) Environmental Restoration Science (BS) Environmental Studies (BA/BS) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Fisheries and Wildlife (BS) Floriculture and Nursery Production (Graduate Certificate) Food Safety and Defense (Graduate Certificate) Food Science (MS/PhD) Food Science and Technology (BS) Food Technology for Companion Animals (BS) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Horticulture (MS) Hospitality, Restaurant, and Tourism Management (BA) Human Sciences (PhD/ED) Human Sciences (Leadership Studies specialization) (PhD) Insect Science (BS) Integrated Science (BS) Integrative Biomedical Sciences (PhD) Landscape Architecture (BS) Leadership (Undergraduate Certificate) Leadership Education (MS) Legal Studies (Undergraduate Certificate) Marketing (BS) Mechanized Systems Management (BS/MS) Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Nebraska Beef Industry Scholars (Undergraduate Certificate) Ornamentials, Landscape and Turf (Graduate Certificate) PGA Golf Management (BS) Plant Biology (BA/BS) Veterinary Science (BS) Veterinary Technology (BS) Water Science (BS)		
	NCTA		
	Agribusiness Management Systems (AAS/AS/Undergraduate Certificate) Agricultural Chemical Application (Undergraduate Certificate) Agricultural Production Systems (AAS/AS/Undergraduate Certificate) Agricultural Welding (Undergraduate Certificate) Equine Training Management (Undergraduate Certificate) Irrigation Technology (Undergraduate Certificate)		Feedlot Operations (Undergraduate Certificate) Laboratory Animal Care (Undergraduate Certificate)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Environmental and Agricultural Systems</b>			
<b>Environmental Service Systems</b>			
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural and Environmental Sciences Communication (BS) Agricultural Economics (MS/PhD) Agricultural Engineering (BS) Agronomy (BS/MS) Agronomy and Horticulture (PhD) Animal Science (MS) Applied Climate Science (BS) Applied Science (BS/MAS) Advanced Horticulture (Graduate Certificate) Biological Engineering (PhD) Biological Sciences (BS/MS/PhD) Biological Systems Engineering (BS) Entomology (MS/PhD) Environmental Restoration Science (BS) Environmental Studies (BA/BS) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Fisheries and Wildlife (BS) Floriculture and Nursery Production (Graduate Certificate) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Horticulture (MS) Insect Science (BS) Integrated Science (BS) Landscape Architecture (BS) Mechanized Systems Management (BS/MS) Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Ornamentals, Landscape and Turf (Graduate Certificate) Plant Health (Doctor) Water Science (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)
NCTA	Agricultural Chemical Application (Undergraduate Certificate) Agricultural Welding (Undergraduate Certificate) Equine Training Management (Undergraduate Certificate) Irrigation Technology (Undergraduate Certificate)		Feedlot Operations (Undergraduate Certificate) Laboratory Animal Care (Undergraduate Certificate)



**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Environmental and Agricultural Systems</b>			
<b>Food Production and Processing Systems</b>			
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Agronomy (BS/MS/PhD) Animal Science (BS/MS/PhD) Applied Climate Science (BS) Applied Science (BS/MAS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Systems Engineering (BS) Food Science (MS/PhD) Food Science and Technology (BS) Food Technology for Companion Animals (BS) Integrated Science (BS) Mechanized Systems Management (BS/MS) Microbiology (BS) Nebraska Beef Industry Scholars (Undergraduate Certificate)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)
NCTA	Meat Culinology (Undergraduate Certificate)		

<b>Environmental and Agricultural Systems</b>			
<b>Natural Resources Systems</b>			
UNL	Advanced Horticulture (Graduate Certificate) Agricultural and Environmental Sciences Communication (BS) Agricultural Economics (MS/PhD) Agronomy (BS/MS) Agronomy and Horticulture (PhD) Animal Science (BS/MS/PhD) Applied Climate Science (BS) Applied Science (BS/MAS) Biological Engineering (PhD) Biological Sciences (BS/MS/PhD) Entomology (MS/PhD) Environmental Restoration Science (BS) Environmental Studies (BA/BS) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Fisheries and Wildlife (BS) Floriculture and Nursery Production (Graduate Certificate) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Horticulture (MS) Insect Science (BS) Integrated Science (BS) Meteorology and Climatology (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	<b>Academic Programs</b>	<b>Related Programs</b>	<b>Programs Under Development</b>
<b>Environmental and Agricultural Systems</b>			
<b>Natural Resources Systems (continued)</b>			
UNL (continued)			
	Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Ornamentals, Landscape and Turf (Graduate Certificate) Turfgrass and Landscape Management (BS) Water Science (BS)		
NCTA			
	Agricultural Chemical Application (Undergraduate Certificate) Equine Training Management (Undergraduate Certificate) Irrigation Technology (Undergraduate Certificate)		Feedlot Operations (Undergraduate Certificate) Laboratory Animal Care (Undergraduate Certificate)

<b>Environmental and Agricultural Systems</b>			
<b>Plant Systems</b>			
UNL			
	Advanced Horticulture (Graduate Certificate) Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Agronomy (BS/MS) Agronomy and Horticulture (PhD) Applied Climate Science (BS) Applied Science (BS/MAS) Biological Engineering (PhD) Biological Sciences (BS/MS/PhD) Biological Systems Engineering (BS) Entomology (MS/PhD) Environmental Restoration Science (BS) Fisheries and Wildlife (BS) Floriculture and Nursery Production (Graduate Certificate) Food Science (MS/PhD) Food Science and Technology (BS) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Horticulture (BS/MS) Insect Science (BS) Landscape Architecture (BS) Mechanized Systems Engineering (BS/MS) Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Ornamentals, Landscape and Turf (Graduate Certificate) Plant Biology (BA/BS) Plant Health (Doctor) Water Science (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)
NCTA			
	Agricultural Chemical Application (Undergraduate Certificate) Agricultural Production Systems (AAS/AS/Undergraduate Certificate) Irrigation Technology (Undergraduate Certificate)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Environmental and Agricultural Systems</b>			
<b>Power, Structural, and Technical Systems</b>			
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Mechanized Systems Management (BS/MS) Mixed Methods Research (Graduate Certificate) Survey Research and Methodology (Graduate Certificate)		
NCTA	Agricultural Welding (Undergraduate Certificate)		

<b>Environmental and Agricultural Systems</b>			
<b>Biotechnology</b>			
UNK	Biology (BS) Chemistry Comprehensive (BS) Molecular Biology Comprehensive (BS)		
UNL	Agricultural and Biological Systems Engineering (MS) Agronomy (BS/MS/PhD) Animal Science (BS/MS/PhD) Applied Science (BS/MAS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Sciences (BS/MS/PhD) Entomology (MS/PhD) Food Science (MS/PhD) Food Science and Technology (BS) Insect Science (BS) Integrated Science (BS) Microbiology (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)
UNMC	Biomedical Sciences (Interdisciplinary Graduate Program granting one PhD with six sub-programs: Integrative Physiology and Molecular Medicine; Immunology, Pathology and Infectious Disease; Biochemistry and Molecular Biology; Molecular Genetics and Cell Biology; Cancer Research; and Neuroscience) Biotechnology (BS) (Co-operative with UNO) Pathology/Microbiology (Bioinformatics track) (MS/PhD) Biomedical Informatics (Joint MS/PhD with UNO)	Center for Drug Delivery and Nanomedicine	
UNO	Bioinformatics (BS) Biomechanics (BS) Biomedical Informatics (Joint MS/PhD with UNMC) Biotechnology (BS) (Co-operative with UNMC) Exercise Science (PhD)	Center for Research in Human Movement Variability	Biomedical Sciences (Graduate Certificate)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Environmental and Agricultural Systems</b>			
<b>Processed Foods</b>			
UNK			
	Chemistry (BA/BS)		
UNL			
	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Agronomy (BS/MS/PhD) Animal Science (BS/MS/PhD) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Systems Engineering (BS) Food Science (MS/PhD) Food Science and Technology (BS) Microbiology (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)
NCTA			
	Meat Culinology (Undergraduate Certificate)		

<b>Health Sciences</b>			
<b>Biopharmaceuticals</b>			
UNK			
	Professional Chemistry and Molecular Biology (BS)		
UNL			
	Agricultural and Biological Systems Engineering (MS) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Sciences (BA/BS/MA/PhD) Biological Systems Engineering (BS) Chemical and Biomolecular Engineering (BS/MS/PhD) Chemistry (BA/BS/MA/PhD) Microbiology (BS)		
UNMC			
	Nanomedicine for Diagnosis and Therapy (Graduate Certificate) Pharmaceutical Sciences (MS/PhD) Pharmacology and Experimental Neuroscience (MS/PhD)	Center for Drug Delivery and Nanomedicine Center for Neurodegenerative Disorders Nebraska Center for Substance Abuse Research	
UNO			
	Chemistry (BA/BS/BGS)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Health Sciences</b>			
<b>Health Care</b>			
UNK	Alcohol and Drug Counseling (Graduate Certificate) Athletic Training (BS) Biology (BS) Chemistry (BA/BS) Clinical Mental Health Counseling (MSEd) Counseling (EdS) Early Childhood Family Advocate (Undergraduate Certificate) Exercise Science (BS) Health Science (BS) Psychology, Psychobiology option (BA/BS) Radiography Comprehensive (BS) Respiratory Therapy Comprehensive (BS) School Counseling - Elementary (MSEd) School Counseling - Secondary (MSEd) School Counseling - Student Affairs (MSEd) School Psychology (EdS) Sociology, Community Emphasis (BS) Speech-Language Pathology (MSEd)		
UNL	Audiology (Doctor) Autism Spectrum Disorders and Severe Disabilities (Graduate Certificate) Behavior Specialist (Graduate Certificate) Early Childhood Special Education (Graduate Certificate) Education and Human Sciences- Speech Language Pathology and Audiology (BS) Food Safety and Defense (Graduate Certificate) Intellectual, Sensory and Developmental Disabilities (Graduate Certificate) Juris Doctorate (at UNL) and Public Health (MPH at UNMC) (Dual Degree Program) Sensory Disabilities (Graduate Certificate) Speech Language Pathology (MS) Transdisciplinary Childhood Obesity Prevention (Graduate Certificate)	Center for Brain, Biology and Behavior	Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD) PhD/MLS (Joint Degree between UNMC's Office of Graduate Studies and UNL's College of Law)
UNMC	All Academic Programs in the College of Allied Health Professions (BSRT, BSCLS, DPT, MPA, MPS) All Academic Programs in the College of Dentistry (BS and DDS) All Academic Programs in the College of Medicine (BS and MD) All Academic Programs in the College of Nursing (BSN, MSN, PhD) All Academic Programs in the College of Pharmacy (Pharm D) All Academic Programs in the College of Public Health (MPH) Biomedical Sciences (Interdisciplinary Graduate Program granting one PhD with six sub-programs: Integrative Physiology and Molecular Medicine; Immunology, Pathology and Infectious Disease; Biochemistry and Molecular Biology; Molecular Genetics and Cell Biology; Cancer Research; and Neuroscience) Biostatistics (PhD)	Center for Health Policy Center for Reducing Health Disparities Interprofessional Experiential Center for Enduring Learning (with UNO, UNL, UNK, and Nebraska Medicine) International Studies Program Summer Medical and Dental Education Program	Center for Patient, Family, and Community Engagement in Chronic Care Management Health Sciences Teaching and Technology (Masters) Leadership and Transferable Skills for Health Sciences (Graduate Certificate) PhD/MLS (Joint Degree between UNMC's Office of Graduate Studies and UNL's College of Law)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Health Sciences</b>			
<b>Health Care (continued)</b>			
	UNMC (continued)		
	<ul style="list-style-type: none"> <li>Business Administration (MBA at UNO) and Pharmacy (PharmD at UNMC) (Dual Degree Program)</li> <li>Business Administration (MBA at UNO) and Public Health (MPA at UNMC) (Dual Degree Program)</li> <li>Community Oriented Primary Care (Professional Certificate)</li> <li>Cytotechnology (Post-Baccalaureate Certificate)</li> <li>Emergency Management (MS)</li> <li>Emergency Preparedness (Professional Certificate)</li> <li>Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree)</li> <li>Epidemiology (PhD)</li> <li>Internationally Educated Nurses (Undergraduate Certificate)</li> <li>Family Medical Therapy (Post-Baccalaureate Certificate) (with UNL)</li> <li>Health Promotion and Disease Prevention Research (PhD)</li> <li>Health Services Research, Administration and Policy (PhD)</li> <li>Infectious Disease Epidemiology (Professional Certificate)</li> <li>Juris Doctorate (at UNL) and Public Health (MPH at UNMC) (Dual Degree Program)</li> <li>Maternal and Child Health (Professional Certificate)</li> <li>Medical Nutrition Education (Post-Baccalaureate Certificate)</li> <li>Nursing Practice (Doctor)</li> <li>Post-Baccalaureate Professional Certificates in six specialty areas: 1) Cardiovascular Interventional Technology; 2) Computed Tomography; 3) Magnetic Resonance Imaging; 4) Diagnostic Medical Sonography; 5) Nuclear Medicine Technology; and 6) Radiation Therapy</li> </ul>		
	UNO		
	<ul style="list-style-type: none"> <li>Applied Behavioral Analysis (Graduate Certificate)</li> <li>Athletic Training (BS/MA)</li> <li>Business Administration (MBA at UNO) and Pharmacy (PharmD at UNMC) (Dual Degree Program)</li> <li>Business Administration (MBA at UNO) and Public Health (MPA at UNMC) (Dual Degree Program)</li> <li>Business Administration (MBA)</li> <li>Business for Bioscientists (Graduate Certificate)</li> <li>Exercise Science (PhD)</li> <li>Neuroscience (BS)</li> <li>Public Administration (MPA)</li> <li>Sociology (MA)</li> <li>Special Education (Behavioral Disorders, Early Childhood Deaf/Hard of Hearing, Mild/Moderate Disabilities, Resource Teaching and Learning Disabilities) (MS)</li> <li>Speech-Language Pathology (MS)</li> </ul>		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Health Sciences</b>			
<b>Medical Devices</b>			
UNK	Chemistry (BS) Medical Technology Comprehensive (BS)		
UNL	Agricultural and Biological Systems Engineering (MS) Biological Engineering (PhD) Biological Systems Engineering (Biomedical Engineering emphasis) (BS) Engineering (Biomedical Engineering specialization) (PhD) Integrative Biomedical Sciences (PhD)		
UNMC		Robotics Initiatives	

**Human Sciences**  
**Education, Social Services**

UNK	Alcohol and Drug Counseling (Graduate Certificate) Biology 7-12 Teaching Field Endorsement (BSEd) Chemistry 7-12 Teaching Field Endorsement (BSEd) Counseling and School Psychology (EdS) Curriculum and Instruction, Reading K-12, Special Education (MAEd) Early Childhood and Family Advocacy (BS) Early Childhood Family Advocate (Undergraduate Certificate) Early Childhood Unified Endorsement (BA) Exercise Science, General Physical Education with Specialization in Sports Administration or Recreation and Leisure (MAEd) Family Studies (BS) Geography 7-12 Teaching Subject Endorsement (BAEd) Geography Spatial/GIS Option (BS) Geography Teaching Subject Endorsement (BSEd) History 7-12 Teaching Subject Endorsement (BAEd) Instructional Technology (MA) Mathematics 7-12 Teaching Field Endorsement (BSEd) Mathematics 7-12 Teaching Subject Endorsement (BSEd) Music Education K-12 (BM) Physical Education (Specializations in Pedagogy or Special Populations) (Master Teacher) Physical Science 7-12 Teaching Endorsement (BAEd) Physics 7-12 Teaching Subject Endorsement (BSEd) Political Science 7-12 Teaching Endorsement (BAEd) Psychology (BA/BS) Psychology 7-12 Teaching Subject Endorsement (BSEd) School Counseling Elementary, Secondary, and Student Affairs Community Counseling (MSEd) School Principalship K-6, 7-12, Supervisor of Academic Area, Supervisor of Special Education (MAEd) School Superintendent (EdS) Social Science 7-12 Teaching Endorsement (BAEd) Social Work (BS) Sociology (BS)		
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**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Human Sciences</b>			
<b>Education, Social Services</b>			
UNK (continued)			
	Special Education K-12 Teaching (BAE) Speech-Language Pathology (MSEd)		
UNL			
	Agricultural Education (BS) Applied Science (BS/MAS) Autism Spectrum Disorders and Severe Disabilities (Graduate Certificate) Behavior Specialist (Graduate Certificate) Child Development/Early Childhood (BS) Early Childhood Education (BS) Early Childhood Special Education (Graduate Certificate) Early Literacy (Graduate Certificate) Education and Human Sciences with a major Special Education (BS) Educational Administration (EdD) Educational Administration (K-12 principalship) (MEd) Educational Administration with a focus Higher Education, Student Affairs, or Athletic Administration (MA/MEd) Educational Psychology (Specializations in Cognition, Learning, and Development; Qualitative and Quantitative Psychometric Methods; and Counseling Psychology) (MA) Educational Psychology with a specialization School Psychology (MA/EdS) Educational Studies with a specialization in Educational Leadership Higher Education (EdD/PhD) Educational Studies with a specialization Teaching Learning and Curriculum (EdD/PhD) Elementary Education (K-6) (BS) Family and Consumer Science Education (BS) Family and Consumer Sciences with a specialization in Youth Development (MS) Family and Consumer Sciences with an option Marriage and Family Therapy (MS/PhD) Family Sciences (BS) Financial and Housing Counseling (Graduate Certificate) Forensic Science (BS) Human Sciences (PhD/ED) Human Sciences (Leadership Studies specialization) (PhD) Human Sciences specializations in Child, Youth and Family Studies and Gerontology (cooperative PhD program between UNL and UNO) Insect Biology for Educators (Graduate Certificate) Intellectual, Sensory and Developmental Disabilities (Graduate Certificate) Juris Doctorate (UNL) and Gerontology (Graduate Certificate at UNO) (Joint Program) Juris Doctorate (UNL) and Social Gerontology (MA at UNO) (Joint Program) K-12 Superintendents (Certificate Program) K-3 Mathematics Specialist (Graduate Certificate) Leadership Education (MS) Legal Studies (MLS at UNL) and Social Gerontology (MA at UNO) (Joint Program) Middle Level Education (BS)		



**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Human Sciences</b>			
<b>Education, Social Services (continued)</b>			
UNL (continued)			
	Music (PhD) Music Education (BME/MM) Music Entrepreneurship (Graduate Certificate) Psychological Studies Education (Specializations in School Psychology; Cognition, Learning and Development; Qualitative and Quantitative Psychometric Methods, Counseling Psychology) (PhD) Response to Intervention: Reading (Graduate Certificate) Secondary Education (and teaching endorsements various areas) (BS) Sensory Disabilities (Graduate Certificate) Teaching English to Speakers of Other Languages (Graduate Certificate) Teaching, Learning, and Teacher Education (MA/MEd) Transdisciplinary Childhood Obesity Prevention (Graduate Certificate) Youth Development (Graduate Certificate)		
UNO			
	Athletic Training (BS/MA) Biomechanics (BS) Black Studies (BA/BGS) Counseling - (Gerontology, Student Affairs Practice in Higher Education) (MA/MS) Counseling- Community Counseling (MA/MS) Criminal Justice (MS) Early Childhood Inclusive (BSE) Educational Administration (EdD) Educational Administration (Educational Media and School Library Administration, K-12 School Administration) (MS) Elementary Education (BSED) Elementary Education (with various endorsements) (MS) ESL (Certification) Gerontology (BGS/MA) Gerontology (BS) Gerontology (Undergraduate Certificate) Health Education (BSED) Health, Physical Education & Recreation (MA) Healthcare Administration, General Studies concentration (BGS) History-Education Subject Endorsement (MA/MS) Human Sciences specializations in Child, Youth and Family Studies and Gerontology (cooperative PhD program between UNL and UNO) Instruction in Urban Schools (Graduate Certificate) Juris Doctorate (UNL) and Gerontology (Graduate Certificate at UNO) (Joint Program) Juris Doctorate (UNL) and Social Gerontology (MA at UNO) (Joint Program) K-12 Counseling (MA/MS) Legal Studies (MLS at UNL) and Social Gerontology (MA at UNO) (Joint Program) Music Education (BM/MM) Physical Education (BSED) Psychology (MA) School Psychology (Cert/MS/EdS)	Certification Alternatives Reaching Exceptional Students	Child Welfare (Undergraduate Certificate) Computer Science Education (MS) Gender and Leadership (Undergraduate Certificate) Gerontology (PhD) Tribal Management and Emergency Systems (Undergraduate Certificate)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Human Sciences</b>			
<b>Education, Social Services (continued)</b>			
UNO (continued)	Secondary Education (with various endorsements) (MS) Secondary Education (with various teaching endorsements) (BSED) Social Work (BSW/MSW) Sociology (MA) Special Education (with various endorsements) (MS)		

<b>Human Sciences</b>			
<b>Law, Justice, Public Safety, Security</b>			
UNK	Advanced Occupational Safety Professional (Undergraduate Certificate) Criminal Justice (BA/BS) Geography Spatial/GIS Option (BS) Occupational Safety Professional (Undergraduate Certificate) Political Science (BA/BS) Psychology (BA/BS) Public Administration (BS) Sociology (BS)		
UNL	Agronomy (BS/MS/PhD) Animal Science (BS/MS/PhD) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Fisheries and Wildlife (BS) Food Safety and Defense (Graduate Certificate) Food Science (MS/PhD) Food Science and Technology (BS) Food Technology for Companion Animals (BS) Forensic Science (BS) Integrative Biomedical Sciences (PhD) Juris Doctorate Juris Doctorate (at UNL) and Public Health (MPH at UNMC) (Dual Degree Program) Juris Doctorate (UNL) and Gerontology (Graduate Certificate at UNO) (Joint Program) Juris Doctorate (UNL) and Social Gerontology (MA at UNO) (Joint Program) Legal Studies (MLS at UNL) and Social Gerontology (MA at UNO) (Joint Program) Legal Studies (MLS) Microbiology (BS) Space and Telecommunication (Master of Laws) (LLM) Space Law (JSD-SL/Executive Certificate) Veterinary Science (BS/MS) Veterinary Technology (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD)
NCTA			Laboratory Animal Care (Undergraduate Certificate)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Human Sciences</b>			
<b>Law, Justice, Public Safety, Security (continued)</b>			
UNMC	<p>All Academic Programs in the College of Public Health Biomedical Sciences (Interdisciplinary Graduate Program granting one PhD with six sub-programs: Integrative Physiology and Molecular Medicine; Immunology, Pathology and Infectious Disease; Biochemistry and Molecular Biology; Molecular Genetics and Cell Biology; Cancer Research; and Neuroscience) Biostatistics (PhD) Business Administration (MBA at UNO) and Public Health (MPH at UNMC) (Dual Degree Program) Community Oriented Primary Care (Professional Certificate) Emergency Management (MS) Emergency Preparedness (Professional Certificate) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Epidemiology (PhD) Infectious Disease Epidemiology (Professional Certificate) Juris Doctorate (at UNL) and Public Health (MPH at UNMC) (Dual Degree Program) Maternal and Child Health (Professional Certificate)</p>	<p>Center for Health Policy</p> <p>Center for Health Services Research</p>	<p>Center for Patient, Family, and Community Engagement in Chronic Care Management</p>
UNO	<p>American Government (Graduate Certificate) Black Studies (BA/BGS) Business Administration (MBA at UNO) and Public Health (MPH at UNMC) (Dual Degree Program) Criminal Justice (BS/BGS) Criminal Justice (MA/MS/PhD) Emergency Management (BS) Intelligence and National Security (Graduate Certificate) Juris Doctorate (UNL) and Gerontology (Graduate Certificate at UNO) (Joint Program) Juris Doctorate (UNL) and Social Gerontology (MA at UNO) (Joint Program) Latino/Latin American Studies (BA/BGS) Managing Juvenile and Adult Populations (Graduate Certificate) Master of Legal Studies and MA in Social Gerontology (joint program with UNL) Political Science (BA/BS/BGS/MS) Public Administration (BGS/MPA) Urban Studies (BGS/MSUS) Women's Studies (BA/BS)</p>	<p>Nebraska Center for Justice Research</p>	<p>Center for Human Rights Tribal Management and Emergency Systems (Undergraduate Certificate)</p>

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Human Sciences</b>			
<b>Hospitality/Tourism</b>			
UNK	Biology, Wildlife Emphasis (BS) Geography Spatial/GIS Option (BS) Recreation, Park and Tourism Management (Travel and Tourism option) (BS) Sociology (Emphases in Community, Globalization and Diversity) (BS)		
UNL	Fisheries and Wildlife (BS) Grassland Ecology and Management (BS) Hospitality, Restaurant, and Tourism Management (BA) Insect Science (BS) PGA Golf Management (BS) Turfgrass and Landscape Management (BS)		
UNO	Geography - Travel and Tourism (BS) Latino/Latin American Studies (BA/BGS)		

<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>Architectural/Construction</b>			
UNK	Advanced Occupational Safety Professional (Undergraduate Certificate) Construction Management (BS) Instructional Technology (MA) Interior Design (BS) Occupational Safety Professional (Undergraduate Certificate)		
UNL	Agricultural and Biological Systems Engineering (MS) Architectural Engineering (BS/MS/PhD) Architecture (M.Arch/MS) Biological Engineering (PhD) Biological Systems Engineering (BS) Civil Engineering (BS/MS/PhD) Construction Engineering and Management (MS) Construction Management (BS) Engineering Management (MEM) Landscape Architecture (Bachelor) Mechanized Systems Management (BS/MS) Ornamentals, Landscape and Turf (Graduate Certificate) Science Design (BS)		Construction Engineering and Management (Graduate Certificate)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>S.T.E.M. (Science, Technology, Engineering, Math)</b>			
UNK	Applied Computer Science (BS) Biology (BS) Chemistry (BS) Computer Information Systems (BS) Computer Science (BS) Geography Spatial/GIS Option (BS) Industrial Technology (BS) Industrial Technology Applied Science (BS) Mathematics (BS/BA) Physics (BS)		
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural and Environmental Sciences Communication (BS) Agricultural Engineering (BS) Agronomy (BS/MS) Agronomy and Horticulture (PhD) Animal Science (BS/MS/PhD) Applied Climate Science (BS) Applied Science (BS/MAS) Architectural Engineering (BS/MS/PhD) Biochemistry (BS/MS/PhD) Biological Engineering (PhD) Biological Sciences (BA/BS/MA/PhD) Biological Systems Engineering (BS) Chemistry (BA/MS/MA/PhD) Computer Science (BA/BS/MA/PhD) Earth and Atmospheric Sciences (MS/PhD) Entomology (MS/PhD) Environmental Restoration Science (BS) Environmental Studies (BA/BS) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Fisheries and Wildlife (BS) Food Safety and Defense (Graduate Certificate) Food Science (MS/PhD) Food Science and Technology (BS) Food Technology for Companion Animals (BS) Forensic Science (BS) Grassland Ecology and Management (BS) Grassland Management (Graduate Certificate) Grazing Livestock Systems (BS) Horticulture (MS) Human Science with a specialization Textiles, Merchandising, and Fashion Design and an option Textiles Science (PhD) Insect Science (BS) Integrated Science (BS)		Complex Biosystems and specializations in: Systems Analysis; Integrative Plant Biology; Microbial Interactions; Pathobiology and Biomedical Science; and Computational Organismal Biology, Ecology and Evolution (Interdisciplinary PhD) Software Engineering (BS)

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>S.T.E.M. (Science, Technology, Engineering, Math)</b>			
UNL (continued)			
	Integrative Biomedical Sciences (PhD) Mathematics (BA/BS/MS/PhD) Mechanized Systems Management (BS/MS) Microbiology (BS) Natural Resource Sciences (MS/PhD) Natural Resources and Environmental Economics (BS) Nebraska Beef Industry Scholars (Undergraduate Certificate) Physics and Astronomy (BA/BS/MA/PhD) Plant Biology (BA/BS) Plant Health (Doctor) Statistics (MA/PhD) Textiles, Merchandising, and Fashion Design (BS/MA/MS) Toxicology (PhD) (Joint with UNMC) Turfgrass and Landscape Management (BS) Veterinary Medicine (DVM cooperative program with Iowa State University) Veterinary Science (BS) Veterinary Technology (BS) Water Science (BS)		
UNMC			
	Biochemistry and Molecular Biology (MS/PhD) Biomedical Sciences (Interdisciplinary Graduate Program granting one PhD with six sub-programs: Integrative Physiology and Molecular Medicine; Immunology, Pathology and Infectious Disease; Biochemistry and Molecular Biology; Molecular Genetics and Cell Biology; Cancer Research; and Neuroscience) Cancer Research (MS/PhD) Cellular and Integrative Physiology (MS/PhD) Environmental Studies (BS at UNL) and Public Health (MPH at UNMC) with a concentration in Environmental and Occupational Health (Collaborative Undergraduate and Professional Degree) Genetics, Cell Biology and Anatomy (MS/PhD) Medical Sciences Interdepartmental Area (MS/PhD) Pathology and Microbiology (Bioinformatics) (MS/PhD) Pharmaceutical Sciences (MS/PhD) Pharmacology and Experimental Neuroscience (MS/PhD) Toxicology (PhD) (Joint with UNL)	Biomedical Research Infrastructure Program Biomedical Research Training Program Center for Cell Signaling Center for Lymphoma and Leukemia Research Center for Staphylococcal Research Nebraska Center for Substance Abuse Research Science Education Partnership Program Summer Research Fellowship Training Program UNeTech: <i>Nebraska's Biomedical Technology Institute</i> (formerly Nebraska Advanced Biomedical Technology Innovation and Discovery Institute) (with UNO)	
UNO			
	Chemistry (BA/BS/BGS) Engineering Physics (BS/BGS) Environmental Studies, General Studies concentration (BGS) General Science (BA/BGS) Geography (BA/MA) Geography (Graduate Certificate) Geology (BA/BS/BGS) Mathematics (BA/BS/MA/MAT)	Center for Research in Human Movement Variability Digital Portfolios NASA Partnership Grants STEP Project UNeTech: <i>Nebraska's Biomedical Technology Institute</i> (formerly Nebraska Advanced Biomedical Technology Innovation and Discovery Institute) (with UNMC)	Computer Science Education (MS) Data Science and Analytics (MS) Intermedia (MFA and Graduate Certificate) Translational Biology (PhD)
NCTA			
	Agricultural Chemical Application (Undergraduate Certificate)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>Transportation, Distribution, Warehousing, and Logistics</b>			
UNK	Business Administration, Supply Chain Management Emphasis (BS) Geography Spatial/GIS Option (BS) Industrial Distribution (BS) Mathematics (BS/BA) Supply Chain Management (Undergraduate Certificate)		
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Engineering Management (MEM) Manufacturing Engineering (MS) Mechanized Systems Management (BS/MS) Supply Chain Management Systems (Graduate Certificate)		
UNO	Aviation (BS/BGS/MPA) Business Administration, Supply Chain Management concentration (BSBA)	NASA Nebraska Space Grant and EPSCoR Program	

<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>Electronics</b>			
UNK	Mathematics (BS/BA) Physics (BA/BS)		
UNL	Computer Engineering (BS) Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Electrical Engineering (BS/MS/PhD) Engineering Management (MEM) Mechanized Systems Management (BS/MS)		Software Engineering (BS)
NCTA	Agricultural Chemical Application (Undergraduate Certificate)		

<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>Heavy Machinery</b>			
UNL	Agricultural and Biological Systems Engineering (MS) Agricultural Engineering (BS) Biological Engineering (PhD) Biological Systems Engineering (BS) Mechanized Systems Management (BS/MS)		
NCTA	Agricultural Welding (Undergraduate Certificate)		

**Future Workforce Opportunities and Academic Program Alignment  
University of Nebraska Programs**

	Academic Programs	Related Programs	Programs Under Development
<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>Manufacturing/Engineering Industry</b>			
UNK	Advanced Occupational Safety Professional (Undergraduate Certificate)		
	Chemistry (BS)		
	Industrial Technology (BS)		
	Industrial Technology Applied Science (BS)		
	Occupational Safety Professional (Undergraduate Certificate)		
UNL	Agricultural and Biological Systems Engineering (MS)		
	Agricultural Engineering (BS)		
	Architectural Engineering (BS/MS/PhD)		
	Biological Systems Engineering (BS)		
	Manufacturing Engineering (MS)		
	Mechanical Engineering (BS/MS)		
	Mechanical Engineering and Applied Mechanics (PhD)		
	Mechanized Systems Management (BS/MS)		

<b>Industrial, Manufacturing and Engineering Systems</b>			
<b>Metal Products</b>			
UNK	Chemistry (BS)		
UNL	Agricultural and Biological Systems Engineering (MS)		
	Agricultural Engineering (BS)		
	Biological Engineering (PhD)		
	Biological Systems Engineering (BS)		
	Manufacturing Engineering (MS)		
	Mechanical Engineering (BS)		
	Mechanical Engineering and Applied Mechanics (MS/PhD)		
	Mechanized Systems Management (BS/MS)		
NCTA	Agricultural Welding (Undergraduate Certificate)		



TO: The Board of Regents  
Academic Affairs Committee

MEETING DATE: March 18, 2016

SUBJECT: Strategic Framework Report on Research

RECOMMENDED ACTION: Report

PREVIOUS ACTION: June 12, 2015 – The Strategic Framework Report on Research was presented to the Board of Regents

EXPLANATION: This report is on the accountability measure for the Strategic Framework goal 4-a-I, “Increase federal support for instruction, research and development, and public service.”

The accountability measure is to increase UNL and UNMC federal research expenditures by 20% more than the weighted total federal appropriations per year on a three-year rolling average. The metric report considers expenditures for FY2013, 2014 and 2015. Neither UNL nor UNMC met the metric target.

Additional data is presented showing the amount and source for all extramural research expenditures as compiled by the NSF Higher Education Research and Development Survey for FY2011 – FY2014.

SPONSOR: David S. Jackson  
Associate Vice President for Academic Affairs

APPROVED: Susan M. Fritz  
Executive Vice President and Provost  
University of Nebraska

DATE: March 2, 2016

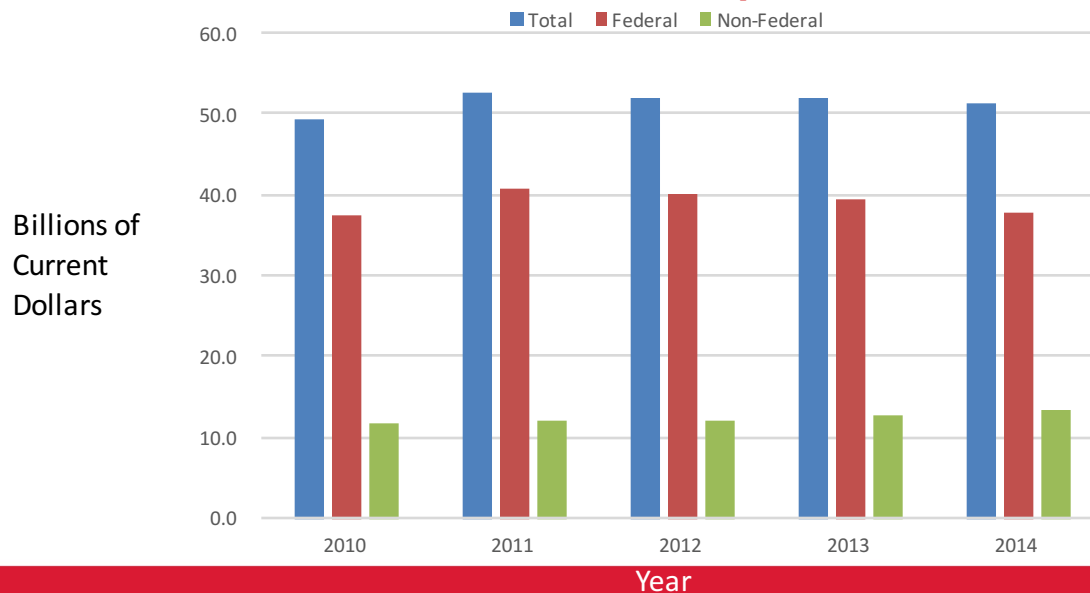
# Federal Research Expenditures

## Strategic Framework Report

Dr. David Jackson  
Associate Vice President for Academic Affairs



### U.S. Higher Education Extramural R&D Expenditures



SOURCE: NSF, Higher Education Research and Development Survey



## National Rankings for All Federally Funded Research Expenditures

Campus	FY2014	Total Fed.*	FY2011	Total Fed.*
UNL	110	0.249%	108	0.259%
UNMC	123	0.201%	123	0.212%
UNL & UNMC	~72		~67	

\*Percent of total national higher ed. federal research expenditures

SOURCE: NSF, Higher Education Research and Development Survey



## Strategic Framework Item 4-a-i (Research)

Increase federal support for instruction, research and development, and public service.

Reporting Period	Accountability Measure	Report Date
FY 2014-2015	Increase UNL and UNMC federal research expenditures by 20% more than the weighted total federal appropriations per year on a three-year rolling average.	March

**Research expenditure targets adjust in concert with available federal funding**



## Metric Calculation Rationale

Three year averaging:

- Campus research expenditures fluctuate year to year
- Federal research funds available to institutions also fluctuate

**A three-year average evens out extreme values**

## Metric Calculation Rationale

Weighted federal appropriations by agency:

Federal agency budgets are increased/decreased at different rates.

- UNMC – Medical Center – Biomedical / Life Science
  - **NIH, DOD**
- UNL – Diverse Research Enterprise
  - **NSF, NIH, USDA, DOD**

**Metric target is weighted to reflect the agency source each campus seeks, and the growth/decline in available funding from each agency**

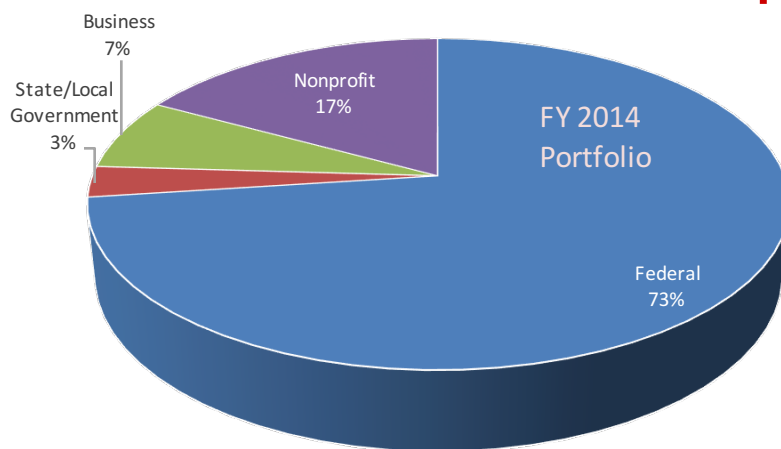
### UNMC Performance Calculation Federal Research Expenditures

FY 2013	FY 2014	FY 2015		3-Year Average
\$80,701,796	\$76,204,223	\$71,791,449	Federal R&D Expenditures	
-4.05%	-5.57%	-5.79%	UNMC Growth Rate	-5.14%
-6.78%	1.11%	-1.92%	Weighted Agency Growth Rates	-2.5%
			20% better than 3-year agency average	-2.0%
<b>UNMC's -5.14 % growth rate does not meet the target metric of -2.0 %</b>				

SOURCE: A-133 Independent Auditors' Report



### UNMC Total Extramural Research Expenditures



FY2011	FY2012	FY2013	FY2014
\$98,517,000	\$107,065,000	\$104,972,000	\$104,484,000

SOURCE: NSF, Higher Education Research and Development Survey



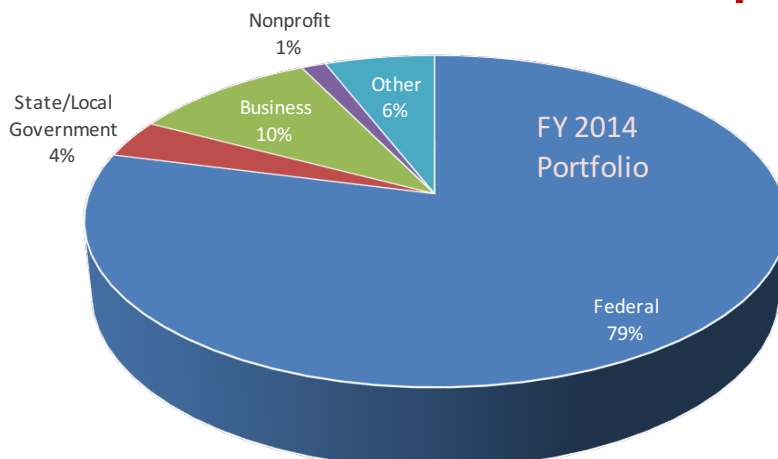
### UNL Performance Calculation Federal Research Expenditures

FY 2013	FY 2014	FY 2015		3-Year Average
\$97,289,090	\$88,005,359	\$96,358,682	Federal R&D Expenditures	
-3.70%	-9.54%	9.49%	UNL Growth Rate	-1.25%
-4.4%	4.5%	0.9%	Weighted Agency Growth Rates	0.31%
			20% better than 3-year agency average	0.4%
<b>UNL's -1.25 % growth rate does not meet the target metric of 0.4 %</b>				

SOURCE: A-133 Independent Auditors' Report



### UNL Total Extramural Research Expenditures



FY2011	FY2012	FY2013	FY2014
\$124,561,000	\$123,652,000	\$122,726,000	\$119,261,000

SOURCE: NSF, Higher Education Research and Development Survey



## Strategic Framework Item 4-a-i (Research)

Increase federal support for instruction, research and development, and public service.

Reporting Period	Accountability Measure	Report Date
FY 2015-2016	Increase UNL and UNMC federal research expenditures by 20% more than the weighted total federal appropriations per year on a three-year rolling average.	Mar/Apr 2017

Continued reporting on the metric is recommended.



## Total Extramural Research Expenditures

	2012	2013	2014
UNK	\$823,000	\$911,000	\$745,000
UNO	\$6,487,000	\$6,293,000	\$6,400,000
UNMC	\$107,065,000	\$104,972,000	\$104,484,000
UNL	\$123,652,000	\$122,726,000	\$119,261,000
<b>Total</b>	<b>\$238,027,000</b>	<b>\$234,902,000</b>	<b>\$230,890,000</b>

SOURCE: NSF, Higher Education Research and Development Survey



# Key Points

- **Grants from non-federal sources have allowed UNL and UNMC to partially mitigate declines in federal expenditures.**
- **Competition for federal research funding remains very high for a declining funding pool.**
  - **The largest US research institutions have, on average, been able to increase their research expenditures; expenditures for mid-size institutions have declined or stayed steady.**
- **To best compete, NU campuses must take advantage of their collective intellectual capacities and physical resources.**



TO: The Board of Regents  
Business Affairs

MEETING DATE: March 18, 2016

SUBJECT: Status Report on Fire Safety and Protection

RECOMMENDED ACTION: Report

PREVIOUS ACTION: April 24, 2010 – The Board of Regents approved variances for UNL Colonial Terrace and University Park apartments as well as 1 six plex, 11 plex, and 2 duplexes at UNMC.  
  
September 6, 2007 – The Board of Regents approved the establishment of *Policies of the Board of Regents 6.4.9 - Fire Safety and Protection*.

EXPLANATION: Board policy requires sprinkling of University-sanctioned housing by 2017, unless otherwise exempted; designation of a Campus Fire Safety Officer; establishment of student conduct regulations; and confirmation of inspection to assure compliance with state law and Board of Regents policies reported annually. The full report for 2015 can be found at [http://nebraska.edu/docs/facilities/NU\\_Fire\\_Safety\\_Protection\\_Report\\_2015.pdf](http://nebraska.edu/docs/facilities/NU_Fire_Safety_Protection_Report_2015.pdf)  
  
During 2015, UNL demolished the Park Apartments and installed centralized smoke detection/fire alarm systems in the three four-plexes at Colonial Terrace.  
  
No proposed exceptions are included in the 2015 report.  
  
As of December 31, 2015, University sanctioned housing consisted of over 12,000 beds in 80 buildings or complexes. 502 inspections were conducted in 2015 and 202 violations have been corrected. 389 fire alarms occurred during the 2015 calendar year, 64 due to planned fire drills. Five incidents involved fire, none major. No injuries occurred and property damage was less than \$1,000.

SPONSOR: Rebecca H. Koller  
Assistant Vice President for Business & Finance  
Director of Facilities Planning & Management

APPROVED: David E. Lechner, Senior Vice President | CFO  
University of Nebraska

DATE: February 24, 2016