Nebraska PKI RESPONSE PLAN

Chancellor Harvey Perlman Chancellor John Christensen

September 20, 2013

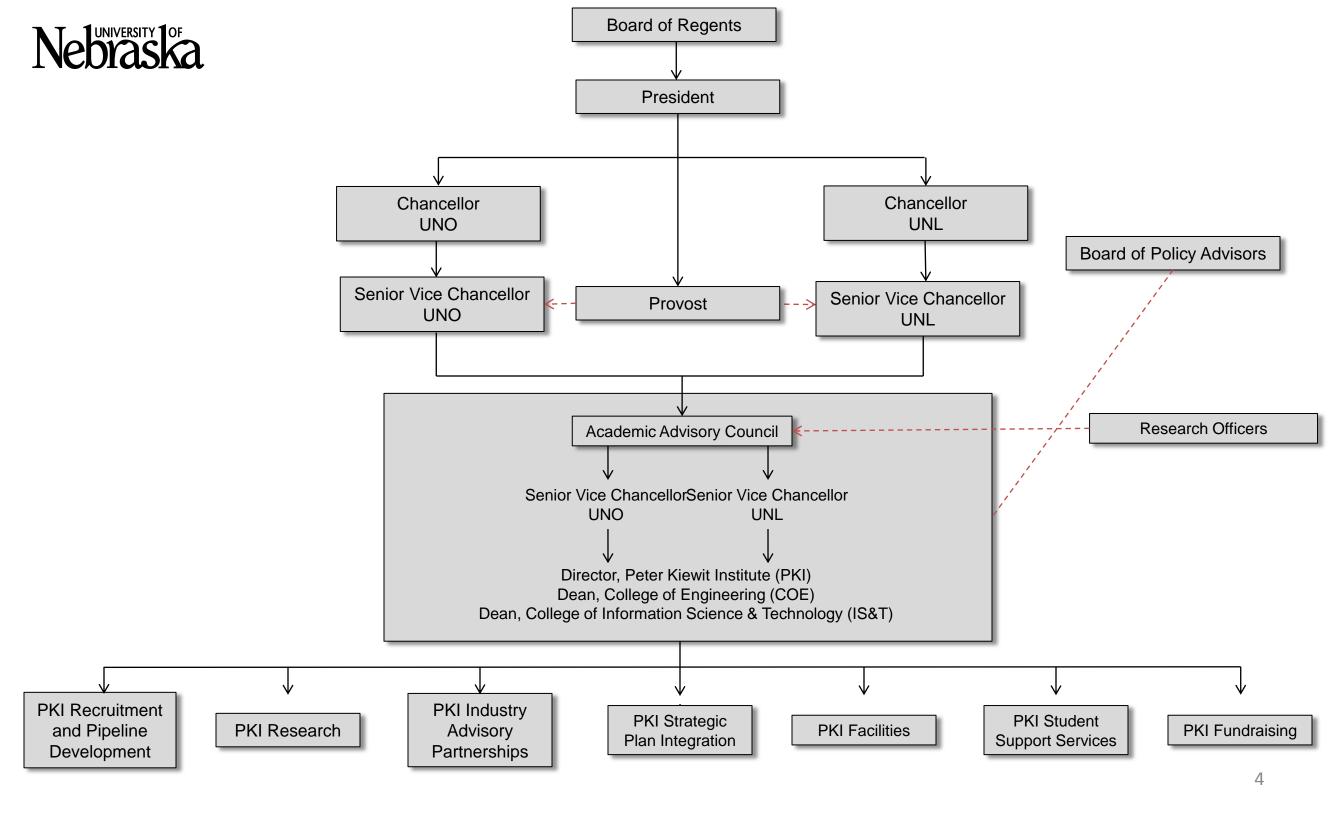


CLARITY OF PKI MISSION

- Original PKI mission is clear and still relevant
- IS&T and COE relationship to PKI mission:
 - create effective graduates
 - produce relevant research
 - connect to industry partners
 - grow reputation, effectiveness, innovation, economic impact, and size of PKI
- PKI Director relationship to PKI mission:
 - PKI Director will collaborate with campuses and colleges to integrate college strategic plans into PKI Strategic Plan
 - PKI Director will facilitate implementation of college goals and objectives with the deans as outlined in the PKI Integrated Strategic Plan
 - PKI Director will help to communicate and build the advantages of PKI and its academic and research opportunities

PKI ORGANIZATIONAL STRUCTURE

- Academic Advisory Council will provide leadership supporting the integration of colleges into PKI and development of a PKI Integrated Strategic Plan
- UNO and UNL Chancellors will charge the Senior Vice Chancellors to oversee and support collaborative activities, resources, metrics via the AAC
- Vice Chancellors for research will advise the AAC on the PKI research agenda
- The PKI Director and Deans will operate as collaborative peers to carry out the integrated mission of PKI under the leadership of the Senior Vice Chancellors
- The AAC will meet regularly to address progress and provide updates to the Chancellors
- The Chancellors will provide periodic updates to the President and BOR





INTEGRATED PKI STRATEGIC PLAN

- The AAC will lead the development and implementation of the PKI Integrated Strategic Plan which will incorporate the newly revised COE and IS&T Strategic Plans
- The Chancellors will have final approval of the integrated plan following input from BOPA and Omaha Industrial Advisory Boards
- Plans will be adjusted as new information and change emerges, such as:
 - Data from Omaha Chamber/UNL/UNO workforce study
 - Constituent feedback
 - New opportunities and/or resources are made available



GENERAL METRICS FOR SUCCESS

- The PKI integrated plan will include timelines and metrics for growth and enhanced effectiveness in five key areas
 - Enrollment
 - Number of graduates
 - Graduation/retention rates
 - Research expenditures
 - Omaha industry engagement



ANNUAL OPERATIONAL PLAN

- The AAC will create an integrated annual operation plan by June 1 of each year
 - Detailing specific action plans and responsibilities for the PKI Director and the Deans for upcoming year
 - Reviewing adjustments of PKI Integrated Strategic Plan
- Annual AAC report to Chancellors including actions, adjustments, and metric based progress
- Annual Chancellor reports to the President and Board of Regents

UNL College of Engineering

Summary of Strategic Plan

Omaha Specific Themes

- Enhance Peter Kiewit Institute's reputation for enrollment and research growth.
- Connect with unique set of enterprises in Omaha, including engineering and construction firms,
 Stratcom, UNMC, etc.
- Capture potential of Durham School to reflect changing construction profession.

College-wide Themes

- Focus on manufacturing related to three major industries in Nebraska
 - Manufacturing of food
 - Manufacturing of civil infrastructure
 - Manufacturing of equipment, devices, and components

Undergraduate Programs

- 33% increase in undergraduate enrollment from 2700 to 3600 over five years
 - Omaha: +400 students (50% increase)
 - Lincoln: +500 students (26% increase)
- Merge EE and CEEN to add Electrical Engineering BS degree in Omaha
- Develop curriculum and capstone courses in programs that interact with major Omaha industries

Graduate Programs

Omaha based Master of Engineering Degree for working professionals

- Omaha: +200 students

– Lincoln: +100 students

Increase graduate students as research increases

Research

- Significant expansion of funded research in Omaha and Lincoln
- Collaborations with
 - UNMC (expand on existing)
 - Stratcom (within NSRI initiative)
 - Omaha industries (i.e., food factory of future)

Research

- Collaboration with I S & T
 - Intersection of big data/high performance computing and civil infrastructure (concept being developed)
 - Intersection of big data/high performance computing and construction safety/efficiency

Investments

Additional faculty lines in next five years

- Omaha: 30 additional (70% increase)

Lincoln: 20 additional (20% increase)

 Requires 35,000-40,000 sq. feet of classroom and faculty space in Omaha

Omaha Objectives

- Better integration of PKI activities with College strategic plans.
- Growth in faculty and students in Omaha-based programs.
- Additional academic Omaha-based programs. Existing programs will continue.
- Increased research collaborations with Omaha-based institutions—private sector; STRATCOM; UNMC

College Objectives

- Enhance educational opportunities for students by making all College activities and assets accessible to students regardless of location.
- Contribute to economic development through research.
- Build a strong, competitive Big Ten College of Engineering for Nebraska.



College of Information Science & Technology

Summary of Strategic Plan



Vision

To be one of the leading IT colleges in the country

- Recognized as a model for next generation IT colleges with a particular focus on IT innovation and interdisciplinary informatics
- Develop an academic unit with excellence in education, research and community engagement; integrating IT disciplines to meet the needs of our students and the communities we serve.



Key Themes

- Strengthen college research activities and graduate/doctoral programs
 - Increase external funds
 - Recruit strong doctoral students
- Expand college recruiting, retention and advising efforts
 - Innovative delivery approaches for state-of-the-art IT programs



Specific Themes

- Expand college efforts to connect with local high schools and business partners
 - Training workshops and short courses for IT professionals and High School teachers
 - Summer workshops for high school students
 - IT internships opportunities for talented high school students at PKI



Specific Themes

- Global Outreach Activities
 - Joint Courses
 - Modular-based Courses
 - Certificates: undergraduate and graduate
 - Dual/Double Degrees with International Partners
 - Joint supervision of doctoral students
 - Joint grant activities



Focused Academic Priorities

- Information Assurance
- Biomedical Informatics
- iSTEM
- Big Data Analytics
- Next Generation Artificial Intelligence



Undergraduate Programs

- Grow Undergraduate 10% in three years
- Grow Enrollment of Women 20% in three years
- Increase graduates 10% in three years
- Increase dual enrollment 20% in three years
- Increase six year graduation rate by 30% in 2015
- Grow undergraduate retention by 8% by 2015



Graduate Programs

- Grow graduate enrollment 10% by 2015
- Graduate over 85% of all masters students in three years by 2015
- Graduate 80% of all doctoral students within five years by 2015



External Funding

- Double annual research funding in five years and reach \$10M by 2020
- Increase externally funded research expenditures by 15% over the next three years



Investments - Research

- Added 2 FTE to support grant development and management since 2008
- Added three post doctoral fellows in 2013
- Hired two new research based faculty in advance of retirements
- Committed to hiring three new research faculty in 2014
- Hired new iSTEM faculty position with dollars committed by UNO administration



Investments – Enrollment & Outreach

- Added new communications coordinator to grow pipeline of new students
- Increased programs directed specifically at growing women in IT fields
- Added a new diversity coordinator to increase recruiting and retaining underrepresented students
- Increase remissions in support of enrollment goals by 50 percent between 2013 and 2015