February 14, 2017

To: Thomas DiLorenzo, Provost and VPAA

From: Paul Lindseth, Dean

Re: Odegard School Follow-Up Information on Proposed Budget Reductions

Below you will find the following information in regards to the requested follow-up information:

1. JDOSAS Strategic Planning Priorities Alignment with Budget Reduction Decisions
2. JDOSAS Ph.D. Programs
3. JDOSAS Initiatives for Professional Graduate Degrees
4. JDOSAS Additional Information on DRAFT Budget Template

JDO Strategic Planning Priorities Alignment with Budget Reduction Decisions

At a time when significant cuts are required to be made at the college level it is extremely difficult to align the reductions to college and university strategic priorities. Also given the timing of this report, there are many unknowns within the college in regards to the faculty and staff voluntary separation process. The decisions made in regard to faculty/staff separation will have a significant impact on the Odegard School priorities and moving forward in a time of significantly reduced resources.

Pillar 1: Learning

Goal 1 – Optimize enrollment of undergraduate, graduate and distance students
Goal 2 – Increase undergraduate retention and graduation rates
Goal 3 – Provide a strong Liberal Arts foundation

The Odegard School has a strong history in leading the university in student recruitment, retention and graduate success both with first-time, full-time students as well as with the transfer student population. We have many long-standing initiatives that have proven successful over the years that we cannot afford to lose during this time of budget reductions. The driving resource behind the Odegard School's success is having adequate faculty members to advise, teach and mentor the 2,000+ undergraduate and graduate students enrolled in our degree programs. Based on admissions data displayed on the iDashboard, we are projected to see a significant increase in undergraduate students enrolling in the Odegard School for Fall 2017. We currently have seven open faculty positions in the college coupled with the anticipation of losing long-time senior faculty members to voluntary separation puts the college in an extremely tough position to carry out our educational mission. Thus, we have not proposed to permanently cut any of the seven open faculty lines. We have demonstrated savings in regards to filling these positions with lower paid faculty.

Data to Support JDOSAS Learning Goals

Retention Rates:
- First-time, Full-time Freshman (FYR) 2015:
  - 88% - JDOSAS
  - 80% - UND Overall

Graduation Rates (2008 Cohort):
- 4-year
  - 34% - JDOSAS
  - 23% - UND Overall
- 5-year
  - 55% - JDOSAS
  - 46% - UND Overall
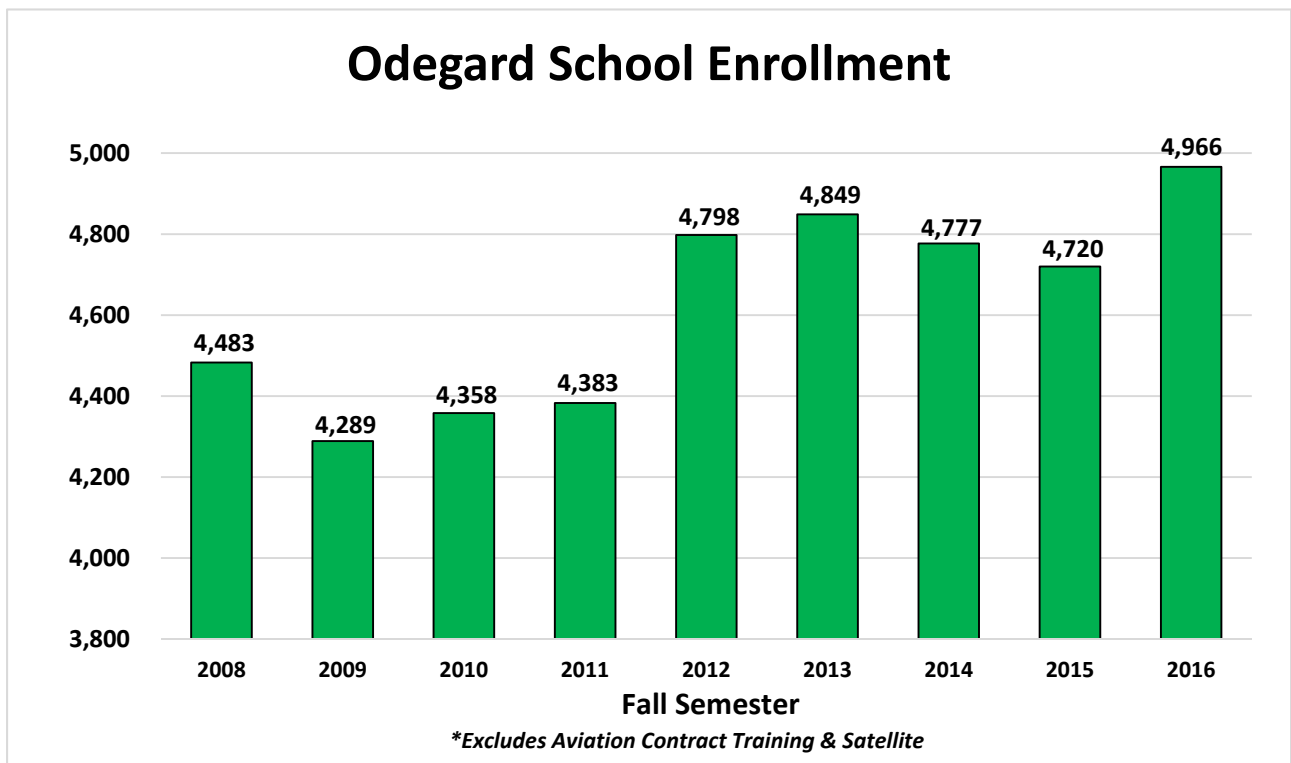- 6-year
  - 67% - JDOSAS
  - 55% - UND Overall

Odegard School Enrollment

Fall Semester	Enrollment
2008	4,483
2009	4,289
2010	4,358
2011	4,383
2012	4,798
2013	4,849
2014	4,777
2015	4,720
2016	4,966

Excludes Aviation Contract Training & Satellite

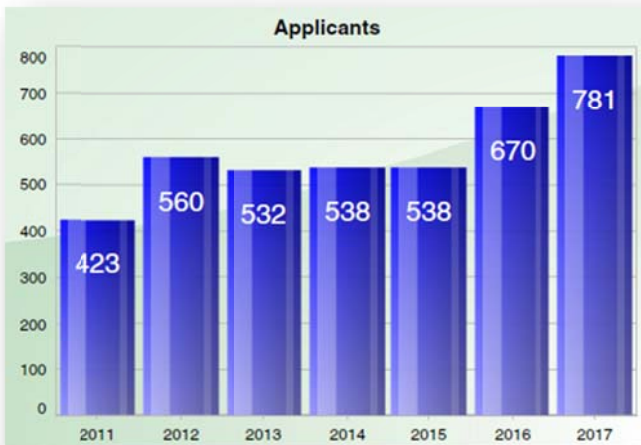Table 1: Odegard School Graduate and Undergraduate Combined Enrollment

Table 2: Applicants JDOSAS as of February 7, 2017 (source iDashboards)

Odegard School Increased Enrollment Considerations

Given the FY16 and FY17 appropriated funding reductions to the Odegard School, please consider the following points when determining any additional reduction in appropriated funding to the Odegard School:

--The Odegard School enrollment over the past five years has not only increased, but at the same time we have added a Ph.D. in Scientific Computing with no additional funding for faculty. In addition, we added the Ph.D. in Aerospace Sciences with only two faculty lines funded for this new Ph.D. program instead of the requested four faculty positions.

--The undergraduate UAS degree program has grown to over 200 majors during the past five years, even though there has been only additional funding for one faculty position. The Aviation department has not only absorbed the additional workload of this UAS major, but absorbed the additional workload of the Aerospace Sciences Ph.D. program.

Pillar 2: Discovery

Goal 1: UND will increase the quality and quantity of innovative and impactful research
Goal 2: Increase Publications and Creative Works

The Odegard School is very productive and successful in regards to garnering external support for research endeavors. Table 3 represents external awards by college per individual faculty member. Note that the Odegard School faculty average over $100,000 in external awards per faculty member, more than any other college on campus.
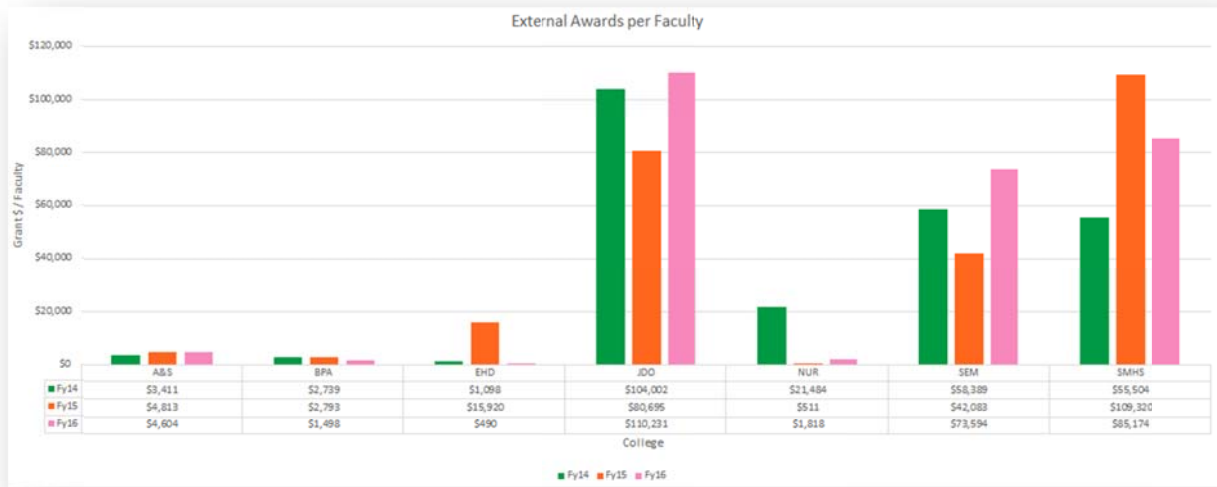
Table 3: External Awards per Faculty

The strategic decision to not eliminate any faculty positions also aligns with the strategic priorities of the university in regards to increasing research outputs.

Odegard School Revenue Generation Considerations

The Odegard School has always had an entrepreneurial approach to its functioning and operations. As a result, as displayed in table 2, the revenue generation per full time benefited employee of UND Aerospace is over $250K per employee. When combining part-time and full-time employees, the revenue generated per employee is over $100K.
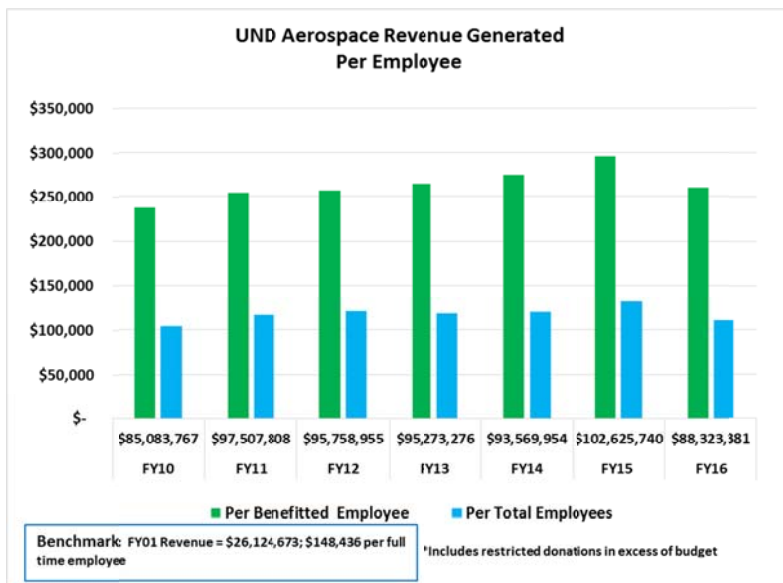

Table 4: Odegard School Revenue Generated per FT Benefitted Employee

JDOSAS Ph.D. Programs

Over the last decade, the Odegard School has developed four new distinct Ph.D. programs in the following disciplines:

- Ph.D. in Earth System Science and Policy
- Ph.D. in Atmospheric Sciences
- Ph.D. in Scientific Computing
- Ph.D. in Aerospace Sciences (Offered interdisciplinary between Space Studies and Aviation)

Combined enrollment for these four programs is 49 students. Selection for admittance is very competitive, and in order to significantly increase the number of openings there would need to be additional faculty resources. Successfully advising and working with doctoral students takes a lot of time from a faculty member's schedule. The Odegard School values the high quality education it offers at the doctoral level and strategically sets enrollment caps to ensure success of the students we admit.

JDOSAS Initiatives for Professional Graduate Degrees

The Odegard School has a long history in providing professional graduate degrees. The Department of Space Studies was a pioneer in developing its interdisciplinary Master's degree in 1987. Less than ten years later (1996), it became one of the first internet-delivered degrees offered in the United States. Today, the MS in Space Studies continues to attract professionals from around the world with consistent enrollments around 125 students. Following in the example of Space Studies, the Department of Aviation began offering its online Master's degree in 2001. The Master's in Aviation is another great example of a professional Master's degree. This innovative and interdisciplinary approach to graduate education has lead the Odegard School over the last 20 years.

Currently the Departments of Computer Science and Earth System Science and Policy (ESSP) are both exploring the feasibility of delivering their Master's degrees online as well. In 2004, ESSP began offering its professional Master of Environmental Management (M.E.M). The M.E.M. degree is a professional program which emphasizes practical experience especially through an internship. The goal of the M.E.M. degree program is to help the students develop the capabilities for a career in environmental management, sustainable development, or environmental policy. It is the goal to begin offering these two Master's online starting no later than Fall of 2018.

Besides developing more online opportunities for Master's education, the college is exploring the development of additional 3+2 degrees programs where students complete both an undergraduate and graduate degree in five-years. This program is already in place for the Department of Computer Science. The Department of Atmospheric Sciences has been exploring this option with a focus on professional meteorology since the Fall of 2016.

The Department of ESSP is in the process of proposing the Earth, Environment and Sustainability Institute (E2SI) in collaboration with the Department of Geography and the Department of Geology and Geological Engineering. This interdisciplinary approach to sustainability studies not only adds to the research goals of the university, but also lends itself perfectly to a collaborative approach to student learning. Currently the institute is designed for students to pursue a BS degree in either Environmental Geosciences or Environmental Studies, this can lead into a Master of Environmental Management. Again, the idea being that this program could evolve into a 3+2 undergraduate/graduate professional masters as well.

JDOSAS – Request for additional information from DRAFT budget template

Line items #2 Please clarify if this is a one time savings or you are not filling it.

These are anticipated vacant positions, buyout requests and/or phase retirement requests. For vacant positions, there will be a salary savings for filling at lower level. For buyouts, there will only be a fringe savings in FY18; position should be filled at lower level going forward. For phased retirements, there would be a salary savings in first year or two and will be filled at reduced level in future years.

Line item #3-5 – Are these all RIFs? If so, the Provost will discuss with the Dean who these are. He will want to know which positions and names. #5 – What is SCC?

These are anticipated buyouts and/or RIFs. Actual positions to be determined through the budget process. SCC stands for Scientific Computing Center which is part of department 2200 Academic Support Services.

Line items #6 – Please clarify what is being proposed.

Faculty in this department have agreed to take a 10% pay cut as part of their reduction.

Line item #14 – This would be okay unless the grant goes away.

Atmospheric Sciences has a long history of grant funding and of faculty receiving funding during the academic year. Annual grant awards average $1.5-$2.0M with approximately 25 grants currently funded at a value of well over $5M.

Line item #15 - Please clarify what this means-pseudo pilots.

Pseudo Pilots are ATC Associate positions serving the role of pilots in the ATC simulators in order for experiential learning to occur.

Line item #16 Are you proposing an increase to fees to offset?

These positions are crucial to the mission of the college. Without filling these positions, we would need to cap enrollment. Further analysis will be required to determine available funding through the MIRA model, through program fees and/or differential tuition.