13 October 2025

Dear Members of the UNL Academic Planning Committee,

At our hearing last Friday, Josh Davis read a statement into the record “briefly summarizing the justification for this proposed elimination.” We would like to note that this is not the “justification” provided to EAS by the EVC in his email of 17 September, nearly a week after we were informed of the proposed elimination of our department and all our degree programs. Therefore, we would like to address the new justification statement directly.

Josh Davis stated that we had negative values on 5 of the 7 research "metrics" and 8 of the 9 instructional metrics. While true, this statement was not included in the EVC’s message. Focusing only on the sign and not the magnitude is problematic. To use an everyday analogy, you might hear the morning forecast state that “today’s temperatures will be below normal”; however, your decision as to what to wear that day would be much better if you knew whether it was going to be just one degree below normal or 20 degrees below. Besides that, we don't live in Lake Wobegon, so not every unit can be above average. More to the point, only two of the individual metrics have Z-scores that would indicate significant differences from the mean: Academic Analytics Scholarly Research Index (SRI) and retention, which we addressed in our testimony. All the others are too close to zero to be significant, as illustrated in Table 1 and Figures 1 and 2, below. This is true even for books, which are not a prominent part of overall research output in our fields, even if they are weighted relatively strongly in the SRI. This finding that in most ways EAS is an “average department” in terms of Z-scores is not reflected in the administration’s summary. Moreover, the summary is based on “metrics” that rely on inaccurate and missing data.

As we testified, Academic Analytics has numerous problems with the reported score for EAS, beginning with including several units without an atmospheric science program in the peer group for atmospheric sciences. In addition, Academic Analytics also does not fully include grants from major funders of our research such as the National Oceanic and Atmospheric Administration (NOAA), the U.S. Geological Survey (USGS), the National Aeronautics and Space Administration (NASA), the Nebraska Department of Transportation (NDOT), and the Nebraska Department of Education (NDE), among others. In total, this excluded from the EAS record $5.3M in grant funding to UNL over the last 10 years. Another

University of Nebraska Lincoln
Department of Earth and Atmospheric Sciences
126 Bessey Hall | Lincoln, NE 68588-0340 | 402.472.2663 | eas.unl.edu

shortcoming of Academics Analytics SRI, citation counts, is doubly problematic, as those data were also used by UNL as a separate "research metric." In the complete report submitted to the APC, we show that Academic Analytics reports a citation rate that is an order of magnitude lower than the true value. Because of these issues, those noted by other units, and others that would undoubtedly come to light with enough time and data for a thorough audit, Academic Analytics' SRI should not have been incorporated into the budget-cutting analysis. If it had not, we have no doubt that EAS would not have been proposed for elimination.

During our hearing, Kevin Hanrahan asked us to comment on the results of reanalysis performed by the Department of Statistics, which used better methodology but still suggested that EAS was not a high performing department compared to its peers. Ultimately, in their reanalysis, the Statistics Department could not correct errors in the underlying data. There are several examples of these errors. First, Academic Analytics appeared to consistently underestimate citations and grant funding while overestimating the number of faculty in the department. The combined effect is to dramatically and erroneously reduce any normalized metrics. Errors in department size are seen in the correlation between faculty number determined independently from department websites vs. faculty number percentile used by Academic Analytics. This value is 0.57 for atmospheric sciences. This is far too small considering that these measure the same thing. Moreover, the correlation between awards percentile and awards *per faculty* percentile is above 0.8, as is the correlation between citation percentile and citations *per faculty* percentile. These should be largely uncorrelated since normalization should remove dependence on department size. Ultimately, this indicates that larger departments are being ranked more highly in Academic Analytics regardless of faculty merit. It is likely that EAS was penalized due to a combination of overreporting for size and underreporting for achievement, which is probably also affecting low-ranking of well-regarded programs like Penn State that also have very low SRI percentiles reported. The short answer to Dr. Hanrahan's question is that we do not know how EAS performs relative to its peers, because Academic Analytics does not have adequate data or methods to determine that.

Statements by various administration officials had repeatedly said that the quantitative metrics used were combined with "qualitative assessments like strength of the program, needs of the state, and workforce alignment" (Chancellor Bennett's letter of 4 August 2025). No such qualitative assessment has been provided to EAS or, to our knowledge, any of the other affected departments. Moreover, it is not clear if these were collected before or after programs were identified for elimination. Regardless, this means that departments were not provided with all the evidence used to make these decisions, contrary to claims of transparency by UNL administration.

Finally, an oft-stated goal of the University of Nebraska is to regain membership into the Association of American Universities (AAU), which excluded UNL in 2011. Many administrators have stated on numerous occasions that we cannot cut our way into the AAU, which is as true a statement as anyone can make. According to the letter from John Shrader to the UNL Faculty Senate dated 3 October 2025, between fiscal year 2018 and the current fiscal year (2026), state appropriations directed to UNL increased by less than one percent (+0.68%), based on public records. Over that same period, UNMC had an increase of +28%, UNO +15%, UNK +15%, and Central Administration a whopping +106%, After adjusting for inflation, "UNL's state appropriated funds are down 24 percent over the last eight years." Only UNMC and Central Administration received inflation-adjusted increases in state appropriations over that period. It should not be surprising to anyone that UNL has already "reduced our budget several times in recent years" (Chancellor Bennett's letter of 4 August 2025) prior to the current proposed cuts. If the goal is to improve our chances of regaining membership in the AAU, starving the flagship, R-1, land-grant campus – and then cutting academic breadth, in response – is a strange approach. Even with all the problems associated with Academic Analytics' SRI, it is the only index that compares the 56 UNL units with a reported SRI against "peers" (i.e., public AAU member departments). Using the original, reported SRI (Table 2) – prior to UNL's "normalization" that rendered it meaningless for such a comparison (please refer to the Statistics Departments' discussion with an analyst at Academic Analytics) – only 6 units at UNL have above average (positive) values, while 48 units have below average values (note that two additional units have a reported SRI of zero). This clearly demonstrates the need to increase investment in academic programs at UNL across the board, and does not appear to be a healthy basis for the important business decision to cut academic programs at UNL.

On behalf of the faculty, staff, students, and alumni of EAS,

Clint Rowe,
Professor and Chair,
Earth & Atmospheric Sciences
crowe1@unl.edu

Table 1: Instruction and research "metrics" used in the budget cutting process, with "statistically significant" values in red. These cannot be considered true statistical significance, as that generally assumes a normal distribution without outliers.

Instructional Metrics - EAS	**Z-score**	**Cum prob**	**p ≠ 0**
zinstructional_sch_4Y_share_growth	-0.461	0.32276	0.177
zall_majors_share_growth	-0.181	0.42858	0.071
zinstructional_sch_2024	-0.532	0.29806	0.202
ztotal_majors_n_2024	-0.763	0.22363	0.276
zinstructional_sch_to_instructional_fte_2024	-0.432	0.33360	0.166
zbudget_to_sch_2024	0.184	0.42858	0.071
ztotal_realizable_base_tuition_less_budget_2024	-0.391	0.34827	0.152
zavg_retention_rate_2024	-1.974	0.02442	0.476
zratio_completions_majors_2024	-0.155	0.06057	0.439

Research Metrics - EAS	**Z-score**	**Cum prob**	**p ≠ 0**
sri_aau_public_peers	-1.869	0.03074	0.469
awards_budget_inc_nuf_z_score	0.146	0.55962	0.060
research_awards_growth_inc_nuf_z_score	-0.038	0.48405	0.016
p1_expenditures_normalized_z_score	0.636	0.73891	0.239
awards_normalized_z_score	-0.288	0.38591	0.114
books_normalized_z_score	-0.504	0.30854	0.191
citations_normalized_z_score	-0.056	0.48006	0.020

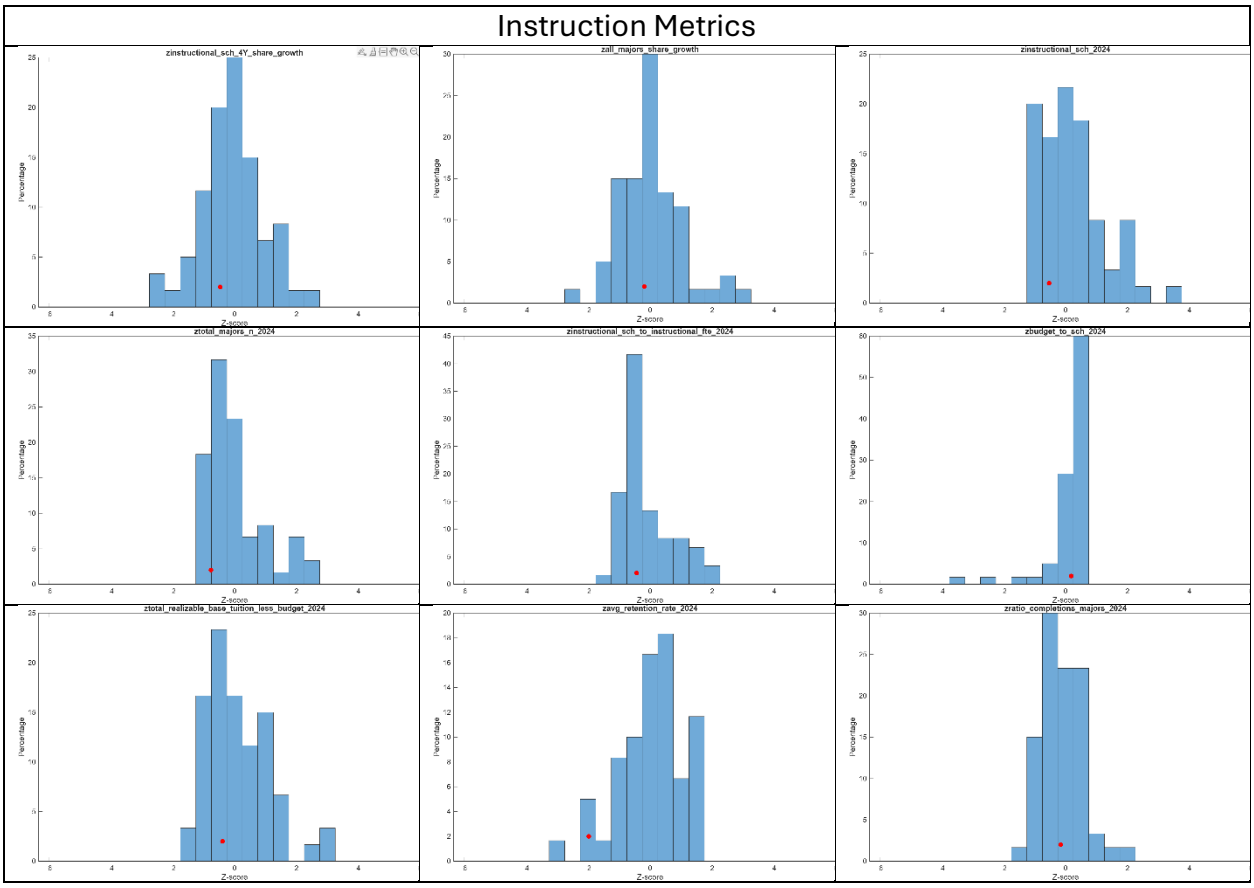

Figure 1: Histograms of the individual components of the "instruction metric" used in the budget cutting process, with the value for EAS indicated by the red dot.

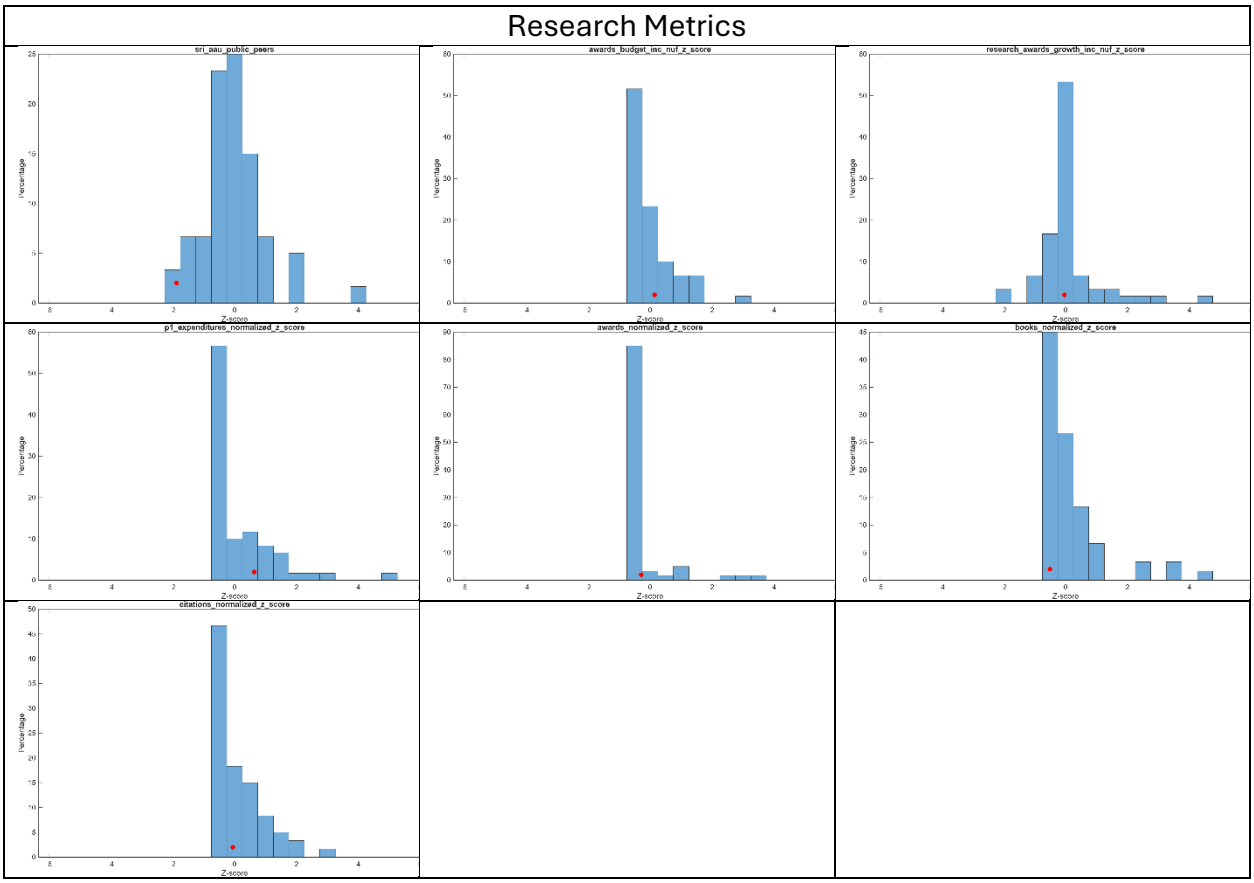

Figure 2: Histograms of the individual components of the "research metric" used in the budget cutting process, with the value for EAS indicated by the red dot.