## Attaining and Preserving Excellence in the Arts and Sciences at The Ohio State University



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## Executive Summary

In January of 2019, interim Dean of the College of Arts and Sciences (ASC), Jan BoxSteffensmeier, charged a committee of 10 ASC faculty to make recommendations about maintaining, sustaining, and enhancing excellence in ASC at The Ohio State University (OSU). In Part I of our report, we provide an overview of factors associated with excellence and make some general recommendations about how it can be attained and enhanced. In Part II we provide specific suggestions regarding excellence within the departments that constitute ASC.

Our primary thesis is that the excellence of a University is tied most strongly to the profile of its faculty, their accomplishments and their national and international reputations. Outstanding faculty attract and train the best students and contribute cutting-edge research, creative activity, and practical solutions to crucial problems of the state, nation, and the world. We provide some data that support the view that the overall reputation of OSU is most highly dependent on the reputations and excellence of the core ASC units. We note that the overall reputation of OSU as a comprehensive research university has been falling over the past 5 years. This decline in reputation is likely linked to a significant reduction in the number of tenure track faculty in the university overall and especially in ASC, as well as other factors.

Our report documents past efforts at enhancing excellence at OSU and makes recommendations for the future. Three past initiatives (Selective Investment, Targeted Investments in Excellence, and the Discovery Themes Initiative) are described. The first two made some positive strides but may not have been supported long enough or at a sufficient level to gain traction and produce all of the intended effects. The Discovery Themes initiative, though also producing some benefits, did not increase the size of the OSU faculty as intended, and its impact on fostering excellence was reduced because it prevented or postponed key departmental needs for renewal. We call for a new excellence initiative that is faculty-driven, sustained, and targeted to the core programs that are so fundamental to the university's national reputation. Once these core programs receive sufficient support, attention can turn once again to more novel and OSU-distinctive programs.

Attaining excellence requires both a change in culture and financial resources. OSU is hampered by its relatively low support from the state of Ohio, its relatively low tuition, an endowment that is smaller on a per student basis than our aspirational peers, and a relatively low allocation of faculty generated income to faculty support. If OSU is to enhance excellence without additional resources, decisions regarding resource allocation must change. For example, a greater fraction of faculty-generated income could be used to fund faculty hiring, and OSU's budget model could be modified to focus less on credit-hour generation and more on attaining academic excellence.

With respect to hiring faculty in ASC, we recommend prioritizing departments that are already highly regarded nationally and ensuring that their excellence does not erode. Specific instances are noted in Part II of our report. We also urge the College to provide a higher degree of long-term predictability in hiring to facilitate better planning at the unit level. Once core units are sustained, we recommend an ASC-specific targeted investment program that cuts across departments. Other recommendations include reducing ASC bureaucracy and delegating more decision-making authority to Divisional Deans and Chairs. If excellence in the Arts and Sciences is not protected and nourished, the overall reputation of the University is likely to decline further. The committee concluded that this decline could be reversed if ASC receives a level of support commensurate with the University's excellence goals.

## Part I: Overview and General Recommendations

The primary goal of this report is to assess the overall state of excellence in the College of Arts and Sciences (ASC) at The Ohio State University (OSU) and to provide recommendations about retaining the excellence already present as well as identifying opportunities for expanding its excellence in the future. To do this, it is first necessary to define what we mean by "excellence." We adopt the sentiment expressed by OSU's current Provost, Bruce A. McPheron who said,

Excellence - this is all about having the best faculty in the world. If no one has heard of your faculty, it is an uphill climb to get them to recognize your institution as a great institution... (Panandiker, 2016)

Faculty excellence is key to a University's excellence for a number of fairly obvious reasons. First, faculty who are outstanding -- especially in research or creative activity -- are the most important contributors to the overall national and international reputation of the university. This reputation then attracts the best and brightest students, both graduate and undergraduate. Second, in many fields these faculty bring in the grants, produce the inventions, and generate other resources that enable a high level of scholarly and creative activity and impact. Third, although outstanding scholarship does not invariably go with excellent teaching, it is often a program's strongest and most active scholars who design the innovative curricula that underpin excellent undergraduate and graduate education, and students respond strongly to a professor's evident passion for his or her field of work.

The clear conclusion from these statements is that enhancing excellence at OSU requires above all that the University recruit outstanding faculty, provide them with the environment and resources that enable them to do their best work, and retain them over time so initial investments are not wasted and these faculty remain at Ohio State as their international reputations grow. Although faculty quality is more important than overall quantity, it is the case that the reputation and impact of a program often depends on having multiple strong faculty in a research area. When outstanding senior faculty leave and cannot be replaced either with comparably strong senior hires or at a minimum with outstanding junior hires, then decline is the most likely outcome. The process is self-reinforcing in both directions: excellent faculty enable a department to attract and retain other excellent faculty, while departures without replacement can lead to a loss of morale and accelerated departure of those faculty (typically the best) who can find other options.

In sum, investment in faculty is critical to the overall reputation of Ohio State. At present, as a research University, Ohio State ranks somewhere between $30^{\text {th }}$ (U.S. News and World Report) and $42^{\text {nd }}$ (Shanghai Global Ranking) in the U.S. Although this ranking puts Ohio State above all other public and private universities in Ohio, it corresponds to a place between $46^{\text {th }}$ (U.S. News) and $94^{\text {th }}$ (Shanghai) internationally. It is notable that although these two major ranking services rely on somewhat different indicators, the correlation between the Top 30 Universities in the Shanghai index with that in U.S. News is .93 . Thus, these indices are saying the same thing. ${ }^{1}$ The Shanghai

[^0]research ratings are particularly useful because they allow comparison of a University's rankings across time. In this regard, the news is not good for Ohio State. Although OSU has traditionally been rated in the Top 30-40 of Universities nationally (depending on the rating agency), it aspires to be higher, and even our current moderate rankings are in severe danger of slipping. Indeed, there are already signs of decline over the past several years. As depicted in Figure 1, OSU's global ranking which had shown improvement from 2003 to 2007 and remained relatively steady for about seven years, has shown a sharp decline over the past four years, dropping from the 60s to the 90s in rank internationally (which translates into dropping from the 30 s to the 40 s in the U.S.)

Figure 1: OSU's International Ranking among Research Universities From 2003 to 2018



## A. ASC Excellence Determines University Excellence

Because these ranking services also provide rankings of specific disciplines and collections of disciplines, it is possible to examine which high quality programs best predict being ranked among the top research Universities in the U.S., and thus which disciplines, if neglected, will likely lead to a drop in overall ranking. Table 1 provides the Shanghai rankings for clusters of academic subjects for the Top 30 U.S. Universities. ${ }^{2}$ The correlation between general academic cluster rankings and overall University rankings among the Top 30 makes clear that the higher a University is ranked in the core Arts and Sciences disciplines, the higher the overall university rank is. As detailed in the bottom row of Table 1, the correlations for the ASC clusters were quite similar. The highest prediction of a University's overall ranking comes from the Social Sciences cluster (SOC; $r=.66$ ), then the Life Sciences (LIFE; $r=.63$ ) and then Natural Sciences (SCI; $r=$ $.58)$ and Arts \& Humanities (A\&H, $\mathrm{r}=.58$ ). Notably, how highly ranked a university is in Medicine (MED, $r=.35$ ) or Engineering ( $\mathrm{ENG}, \mathrm{r}=.10$ ) shows substantially weaker predictive power. Thus, a decline in reputation of the core Arts and Sciences disciplines would be associated with a larger negative impact on a university's overall ranking than is the case with the

[^1]professional schools. ${ }^{3}$
Table 1: Shanghai Rankings of U.S. Research Universities (and in Academic Clusters)

| RANK | Institution Name | SCl | ENG | LIFE | MED | SOC | A\&H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Harvard | 4 | 37 | 1 | 1 | 1 | 2 |
| 2 | Stanford | 2 | 2 | 4 | 3 | 7 | 13 |
| 3 | MIT | 5 | 1 | 3 | 51 | 5 | 11 |
| 4 | UC - Berkeley | 1 | 8 | 7 | 47 | 3 | 7 |
| 5 | Princeton | 3 | 32 | 51 | x | 4 | 14 |
| 6 | Columbia | 12 | 151 | 13 | 7 | 6 | 14 |
| 7 | U. of Chicago | 18 | x | 49 | 43 | 2 | 16 |
| 8 | UCLA | 10 | 29 | 15 | 11 | 19 | 12 |
| 9 | Cornell | 17 | 51 | 17 | 24 | 24 | 30 |
| 10 | Yale | 20 | x | 8 | 10 | 17 | 4 |
| 11 | U. of Washington | 26 | 42 | 6 | 2 | 26 | 80 |
| 12 | UCSD | 36 | 23 | 13 | 19 | 27 | 28 |
| 13 | U. of Pennsylvania | 47 | 151 | 22 | 16 | 13 | 17 |
| 14 | Johns Hopkins | 23 | 76 | 12 | 5 | 51 | 72 |
| 15 | Northwestern | 16 | 36 | 101 | 27 | 11 | 36 |
| 16 | Duke | 34 | 101 | 31 | 21 | 15 | 30 |
| 17 | $U$ of Michigan | 19 | 15 | 28 | 22 | 12 | 8 |
| 18 | $U$ of Wisconsin | 27 | 101 | 18 | 30 | 51 | 25 |
| 19 | UNC | 151 | x | 19 | 12 | 23 | 60 |
| 20 | NYU | 101 | 101 | 51 | 76 | 9 | 6 |
| 21 | U of Minnesota | 48 | 37 | 32 | 25 | 14 | 74 |
| 22 | $U$ of Colorado | 11 | 76 | 76 | x | 76 | 125 |
| 23 | U of Texas | 40 | 10 | x | 151 | 21 | 23 |
| 24 | $U$ of Illinois | 28 | 13 | 29 | x | 37 | 34 |
| 25 | UCSB | 15 | 33 | 76 | x | 76 | 84 |
| 26 | Vanderbilt | 151 | x | 51 | 15 | 41 | 149 |
| 27 | U of Maryland | 51 | 51 | 51 | x | 34 | 52 |
| 28 | U. Southern California | 76 | 51 | 51 | 46 | 36 | 61 |
| 29 | Boston University | 76 | x | 101 | 39 | 76 | 81 |
| 30 | Penn State | 49 | 51 | 51 | x | 29 | 28 |
| 42 | Ohio State | 76 | 47 | 76 | 45 | 25 | 32 |
|  | *Correlations with rank | 0.58 | 0.10 | 0.63 | 0.35 | 0.66 | 0.58 |

The linkage between ASC disciplines and the overall OSU ranking is also suggested by the data for rankings of the OSU academic clusters over time as shown in Table 2. Consideration of Table 2 along with Figure 1 shows that although the ranking of medicine (MED) at OSU has improved

[^2]considerable over the past 5 years, and the social sciences (SOC) have remained steady at a high ranking, there has been an alarming drop in the rankings of the life sciences (LIFE) and natural sciences (SCI). ${ }^{4}$ It seems likely that the relatively recent drop in OSU's overall international ranking in the Shanghai index is explained at least in part by the drop in the rankings of our basic science disciplines. This obviously must be addressed. That is, an investment in the core ASC basic science units must be made without sacrificing the quality of the Social Sciences, Arts, and Humanities. As documented later in this report, these highly ranked units are in danger of suffering a fate similar to the life and physical sciences (i.e., dropping in national rankings) if they do not receive the necessary attention. Most importantly, as just documented, as the fate of these basic ASC disciplines go, so goes the fate of the University as a whole. Beyond the link of ASC disciplines to the University's reputation, the arts and humanities foster community engagement, the life and physical sciences (STEM) are a national priority and contribute to the economic vitality of the state, and the social sciences are critical for understanding and addressing social problems from poverty to combating terrorism.

## Table 2:

| Performance in Academic Ranking of World Universities by Broad Subject Fields |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Broad Subject Fields | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
| SCl | 36 | 36 | 36 | 39 | 43 | 45 | 44 | 51-75 | 51-75 | 76-100 |
| ENG | 26 | 22 | 22 | 26 | 25 | 27 | 30 | 37 | 35 | 47 |
| LIFE | 52-76 | 51-75 | 52-75 | 51-75 | 76-100 | 76-100 | 76-100 | 76-100 | 76-100 | 76-100 |
| MED | 1 | 1 | 1 | 1 | 1 | 101-150 | 101-150 | 51-75 | 51-75 | 45 |
| soc | 23 | 24 | 25 | 27 | 26 | 27 | 29 | 25 | 23 | 25 |

## B. ASC Excellence is in Jeopardy

Given that ASC excellence is an important driver of OSU excellence, it is troubling that the excellence in ASC is on the verge of declining. Why is this? The chief reason in our view is that the number of faculty in ASC has been falling in recent years, as it has in the university overall. Over the past decade, there has been an overall decline in the number of tenure track faculty, from 991 in 2010 to 887 in 2019, a drop of 104 faculty position ( $-10 \%$ ). In that same period, temporary and term faculty have increased by over $50 \% .{ }^{5}$ The loss of tenure track faculty is even worse than these numbers suggest, because many [35\%] of the faculty hires in ASC from the last three years have been through the Discovery Themes Initiative (described shortly). ${ }^{6}$ Thus, the loss of faculty

[^3]in the subfields that ASC departments have identified as their core needs has been larger than it initially appears. Specifically, some of the new hires that were made in the last few years were not in subfields selected by departments based on their reputational and enrollment needs, but rather were based on top-down priorities set at the upper administration levels. Although some excellent scholars were hired under the Discovery Themes Initiative, they often were not faculty who filled critical research and teaching needs identified by the departments whose national reputations depend on the nature of their faculty. Furthermore, departmental losses have been unevenly distributed, with a disproportionate impact on departments whose demographics happened to lead to many faculty retirements during the recent years of minimal ASC faculty hiring.

The number of faculty in ASC is declining in large part because OSU has a budget model that focuses on distributing resources based on marginal changes in credit hours and credit hour delivery in ASC has been declining. There are several reasons for the decline in credit hours in ASC including semester conversion, decisions in the admissions office to enhance enrollments in business and engineering over ASC, more students coming to OSU prepared in the basics with high school AP courses, increasing transfer credits, and others. This credit hour decline may be exacerbated with the newly adopted General Education (GE) Requirements.

As explained shortly, in addition to lower levels of funding resulting from reduced credit hours, ASC and all academic areas are underfunded compared to our aspirational peers because of low state support and relatively low tuition. A recent University move toward a focus on "access and affordability" and seemingly away from an earlier theme of "excellence to eminence" has resulted in OSU having relatively low tuition compared to our aspirational peers. OSU has largely been successful in its drive for access and affordability (and improving the overall quality of admitted freshman), but not so much in its drive to enhance its national reputation for excellence in research and creative activity across the academic spectrum.

## C. Prior OSU Excellence Initiatives

The current concern with raising the academic profile of OSU is certainly not a new one. Before discussing the current budget model, a brief review of past OSU programs to attain excellence can provide a useful background against which one can judge potential plans for the future. First, over 20 years ago, in 1997, then Provost Ed Ray initiated a Selective Investment Program (sometimes referred to as the 2010 plan), whose stated goal was to have 10 academic programs ranked in the Top 10 nationally and 20 in the Top 20 by 2010 (Lorenz, 1999). Ultimately, 13 departments or programs were selected for investment in a University-wide competition (Cardiovascular Bioengineering, Chemistry, Economics, English, Electrical Engineering, History, Law, Materials Science, Mathematics, Neuroscience, Physics, Political Science, and Psychology). The Lantern contains various stories about the senior stars these departments hired, many of whom have recently retired or are about to do so with no indication that they can be replaced.

Although the goal of the Selective Investment program was ambitious, the total dollars invested (initially targeted at $\$ 1$ million in annual rate to each program with half coming from the center), ultimately was quite modest as half of the funds were cut due to state budget shortfalls. Nonetheless, many of the units selected showed improvement in their national rankings over the next decade. Had the investment been fully funded, sustained, and expanded to other units, it surely would have had more success. It appears that this ambitious 2010 goal was abandoned by subsequent Provosts, though the Trustees for a time kept a scorecard to track progress.

A second program with a more substantial budget, largely cash with some annual rate, was initiated by then Provost Barbara Snyder -- the Targeted Investment in Excellence program or TIEs (Merrill \& Thompson, 2006). ${ }^{7}$ Rather than focus on individual departments as in Selective Investment, the focus of the TIEs was on cross-departmental initiatives. Ultimately, 10 proposals were selected from 48 submissions developed by the faculty. These included: Climate, Water, and Carbon; the Center for Cosmology and Astroparticle Physics; the Music Industry; the International Poverty Solutions Collaborative; and others. As far as we can tell, there is no systematic set of documents detailing the success or failure of the programs funded, and like Selective Investment, there was little follow-up.

The third and most recent program was first announced by then Provost Joseph Alutto in 2013. This Discovery Themes Initiative ultimately promised a $\$ 100$ million investment in hiring 200 new faculty along with $\$ 250$ million in research and startup expenditures, with costs split between the center and the colleges (Bendtsen, 2013). ${ }^{8}$ This program was aimed at fostering the University's stated vision under Alutto that "Ohio State will be the world's preeminent public comprehensive university, solving problems of world-wide significance." ${ }^{9}$ The Discovery Themes Initiative, still in effect today, has 8 themes under which faculty hires are made: Chronic Brain Injury; Food and Agricultural Transformation; Food for Health; Humanities and the Arts; Infectious Diseases; Materials and Manufacturing for Sustainability; Sustainable and Resilient Economy, and Translational Data Analytics). Unlike the prior two programs which were mostly bottom-up initiatives driven by faculty interests and expertise, the Discovery Themes Initiative was largely a top-down program driven by priorities set by the upper level administration. Perhaps most importantly, under this initiative OSU did not increase its faculty size at all. Rather, the number of tenure track faculty has been on the decline since this program started. Furthermore, as noted earlier, many of the faculty hired, though individually excellent, did not contribute to key departmental needs which went lacking.

Each of the three prior excellence initiatives we have described has had some positive impact on research and creative activity at Ohio State, with major long-lasting effects in some areas. However, each has been of limited duration and scope. Considering the three excellence initiatives just described, it could be said that whereas the smallest program, Selective Investment, was mostly to the benefit of ASC units, the TIEs were more broadly targeted, and the Discovery Themes could be viewed as involving ASC only tangentially. Furthermore, it appears that over the past 20 years, excellence initiatives at OSU have focused less and less on bottom-up programs targeted at the core disciplines (largely within ASC) that are fundamental to the University's overall reputation, and progressively more on top-down programs that are less clearly linked to ASC priorities.

Our recommendation going forward is for the University to focus more on excellence initiatives that are faculty driven and less on top-down initiatives. In our view, faculty driven programs are more likely to have a positive impact on ASC and the University's overall national reputation.

[^4]Attaining faculty buy-in to these programs is critical for their success and is necessary to sustain them when upper level administrators inevitably leave. Following the run of the discovery themes, we strongly encourage the OSU administration to initiate a new excellence program that is facultydriven and targeted to the core programs that are so fundamental to the university's national reputation. Once the infrastructure of core disciplines and programs is supported in a sustainable way, the university can once again turn its attention to fostering novel or OSU-distinctive programs that cut across traditional lines.

## D. Funding to Attain Excellence

As already explained, faculty are at the core of any University's excellence, and the number of faculty at OSU and in ASC has been falling, as has the University's overall ranking. If OSU ever aspires to become one of the world's preeminent public research universities (its stated goal), this means that it would compete with the likes of Berkeley, UCLA, Washington, Michigan, and Wisconsin (the top 5 comprehensive public research universities in Table 1). The first thing that should be recognized is that each of these great state public universities has more resources than OSU. One source of revenue is the state dollars allocated per college student presented in Figure 2. As shown in the figure, Ohio is $9^{\text {th }}$ from the bottom of the 50 states in spending per full time student and clearly below our aspirational flagships in California, Michigan, Wisconsin, and Washington. Indeed, state expenditures per college student in Ohio are below all of the other states in which the 14 Big 10 universities are located except Pennsylvania.

Figure 2: Ohio and Other State funding for higher education per student (2016-2017) ${ }^{10}$


A second source of funding for academics is tuition. Table 3 compares OSU in its in-state and out-of-state tuition to the Top 5 comprehensive public research universities. Notably, OSU's in-state tuition is lower than all of these universities (considerably in some cases), and is even more discrepant in its out-of-state tuition. This, like relatively low state support, puts OSU at a significant funding disadvantage. Interestingly, the flagship university in the only Big 10 state with lower per student expenditures than Ohio (i.e., Penn State University), has compensated for low state expenditures with the highest tuition of any flagship university in the country (i.e., an instate tuition of $\$ 17,900$ ). Furthermore, the other universities in Table 3 have chosen to charge a larger premium for out-of-state students and/or admit a larger percentage of them than OSU, a possibility their high national rankings allow. Ohio State, despite low state support, has chosen not

[^5]to raise tuition to levels allowed by state law. Indeed, a report in the Chronicle of Higher Education (November 12, 2017) stated that OSU had the smallest increase in tuition of any flagship in the nation over the past 10 years (2007-2017). ${ }^{11}$ There are obviously some positive sides to this decision, but it has left OSU significantly behind its aspirational peers in its ability to generate funding to spend on recruiting the top faculty, which ultimately benefits the students, as described earlier in this report. If additional state support is not forthcoming, we recommend that the University consider gradually raising tuition - especially out of state -- to levels more commensurate with its aspirations. ${ }^{12}$

## Table 3: Tuition for OSU and the Top 5 comprehensive public research universities ${ }^{13}$

|  | In State <br> $(2018)$ | Out of State <br> $(2018)$ | \% Undergrad <br> Out of State |
| :--- | :--- | :--- | :--- |
| Ohio State University | $\$ 10,040$ | $\$ 29,230$ | $23-27 \%$ |
| University of Wisconsin | $\$ 10,490$ | $\$ 32,740$ | $29-32 \%$ |
| University of Washington | $\$ 10,750$ | $\$ 34,790$ | $34-39 \%$ |
| UCLA \& Berkeley | $\$ 13,490$ | $\$ 40,170$ | $25-28 \%$ |
| University of Michigan | $\$ 14,400$ | $\$ 45,410$ | $45-48 \%$ |

Another reason OSU has less funding for hiring faculty may result from the manner in which the University allocates its available funding. That is, according to a report from the ASC Senate (see footnote 5), the fraction of the University's income generated from all faculty activity (i.e., state instructional support, tuition, indirect costs on research grants) that is allocated to faculty compensation and benefits is $16 \%$, a ratio that has remained steady over time. Considering income from just tuition and state support, the fraction is $26 \%$. We endorse the recommendation of the ASC Senate to raise the proportion of faculty generated income that is actually spent on faculty over the next several years. Even a modest increase in this percentage would enable sizeable advances in the quality of teaching, research, and creative activity across the University and is one thing the University can do in the absence of competitive state funding and tuition levels.

As an imperfect analogy, one would not expect the athletics departments with impoverished budgets to be at the top of the national rankings in numerous sports. Rather, the universities that are in the Top 10 in their athletics budgets are frequently in the Top 10 in performance because they can pay their athletic staff competitive salaries and construct the sports facilities that attract the top student-athletes. Similarly, one cannot expect a University with relatively low academic resources to be high in national rankings as it will not have the budget to pay its faculty competitive salaries or have the best research facilities. Indeed, given Ohio State's disadvantage in

[^6]resources compared to our aspirational peers, OSU may be overperforming. If there are comprehensive public research universities that are more highly ranked than OSU but spend less per student on faculty or academics in general, it would be worthwhile to study them to understand how they achieve this.

## E. Attaining Excellence with Current Resources

As just noted, one thing Ohio State can do within its current budget is to allocate a greater percentage of faculty generated resources to faculty positions. There are other potential budgetary solutions as well. First, it can be argued that the current University budget model is at best orthogonal and at worst antithetical to academic excellence. There are two components to this problem: the allocation of resources to Colleges via credit-hour based Responsibility Center Management (RCM) budgeting, and, as already discussed, the fraction of income derived from faculty activity that is "taken off the top" before RCM even applies. Under OSU's version of RCM, the primary metric for allocation of resources to Colleges is marginal change in credit hours, so the primary incentive for each College is to maximize its share of credit hours at the expense of other Colleges. ${ }^{14}$ Not surprisingly, given the incentives, maximization of market share is where Colleges focus much of their energy, regardless of whether it advances excellence in any aspect of the University's mission. College and University initiatives to advance excellence in research and creative activity (such as those described earlier) often amount to rearguard actions that try to undo or mitigate the dominant effects of the underlying budget model.

One acute problem with the marginal change credit-hour based budget is that College resources can change rapidly and unpredictably as a result of external factors that are not tied to any ASC policies, such as University enrollment decisions, quarter-to-semester conversion, changing credits from Advanced Placement (AP) exams, the college credit plus program, transfer credits, and changes in GE requirements. A large fraction of College resources are tied to salaries and benefits of tenure track faculty and support staff, which cannot change on such short timescales. All of the above external factors have negatively impacted the ASC budget over the past decade, and in response to this, the College has rapidly shrunk faculty size and chipped away at many of the programs that support research and creative activity and that contribute critically to the University's reputation.

Fortunately, ASC does not impose the University's RCM formula down to individual divisions or departments. In recent years it has paid attention to incentivizing departments to increase overall ASC credit hours rather than simply transferring credit hours from one unit in ASC to another. Naturally, student enrollments are an important element in deciding how to allocate faculty and other resources at the department level, but some disciplines are inherently more expensive to teach than others, and excellence in research and creative activity does not necessarily track credit hours. We encourage ASC to maintain its holistic approach to budgeting at the division and department level even if the University remains formula-bound at the College level. That is, the college needs to allocate its budget to foster and reward excellence separate from individual department enrollments.

[^7]If the current RCM budget is not optimal for fostering excellence, how might the university budget model be changed? First, the university could start with an allocation to colleges based on credit hours, but then supplement or deduct from that budget based on that college's role in fostering university-wide excellence. Currently, the university taxes budgets for many purposes, but imagine an excellence tax on credit hour allocation such that those funds would be distributed back to colleges based on their role in fostering the university's mission and raising its overall national and international reputation. Furthermore, the university might decide that some other taxes are not as vital to excellence and reallocate those funds to units that are integral to excellence. Finally, if the university allocation to colleges is to remain largely credit hour based, colleges should have a more important role in admissions and other academic decisions than currently. For example, ASC might decide to admit more incoming freshman to its college even if that means a small decline in freshman ACT scores overall. It is likely that by admitting more freshmen and cutting back a bit on the number of transfer students (who have lower ACT scores than incoming freshman on average), the overall quality of undergraduate students attending OSU could be increased while at the same time enhancing the ASC budget.

A more dramatic possibility is to move away from the RCM budgeting entirely and return to base budgets. Such budgets must be influenced in part by credit hours, of course, but not exclusively. Funding is brought in partly by students in seats much as athletic department revenue derives partly from spectators in seats. Yet, athletic department funding is distributed to enhance excellence across the units managed. OSU may never have the resources to compete at the top level in every academic domain, but it must maintain some areas of excellence. The University might consider a wholesale redesign of its budget model to one that aligns the budget with the University's academic priorities. A medium-scale change that would be a great improvement would be to separate the Present Budget Allocation (PBA) associated with faculty salaries and benefits from the RCM formula. This would enable Colleges and the University administration to negotiate long-term plans regarding changes in their faculty size or faculty compensation. The short-term vicissitudes that drive credit-hour changes would affect aspects of College budgets that can be adjusted on shorter timescales and that in some cases have a more direct connection to numbers of students in courses.

## F. Building a University-wide Culture for Sustained Excellence

As just explained, aligning the University budget model with OSU's excellence objectives and supporting excellence initiatives are critical factors in driving excellence across the University. However, it is just as important to build a University and College culture that values, promotes, and expands scholarly excellence, consistently across time and across academic areas. The most successful ASC units have built such a culture internally, rewarding outstanding scholarly achievement and fostering collaboration and a sense of shared purpose among their faculty and staff.

Unfortunately, our view is that many faculty do not regard the University administration as an asset in promoting academic excellence or in achieving their scholarly goals. ${ }^{15}$ Furthermore, the faculty sometimes feel that the University administration does not regard them as assets either, but

[^8]rather as employees to be managed. These faculty attitudes have largely applied to the ASC administration as well, although a more positive regard is perceived at the college level. There are numerous reasons for these attitudes: a University budget model that appears to value credit hours above all else; a University and College decision-making process in which faculty consultation seems largely pro forma; bureaucratic procedures that seemingly disregard the time costs that they impose on faculty and staff (e.g., travel policy, equipment auditing); a human resources bureaucracy that too often raises obstacles to the goals of academic units (e.g., delays in hiring decisions) rather than helping to achieve them; and the relatively low profile of research and scholarship in University-level statements regarding Ohio State's goals and likewise in Board of Trustees-level discussions of University policy.

Advancing academic excellence at Ohio State in a sustained way across many fields requires building a culture that values and promotes scholarship and creative achievement, one that is recognized as such by faculty and by administrators. For this reason, we endorse the findings and recommendations of the Committee on Talent and Culture at Ohio State (prepared under the auspices of the Office of Research). ${ }^{16}$ At all levels, increasing and broadening faculty involvement in decision-making and leadership will lead to better use of the University's resources and will improve retention of the University's best scholars. At the ASC level, recent increased emphasis on highlighting scholarship and research in College communications has been an important positive, but a constant drive towards centralization isolates faculty from the decisions that most directly affect them, and the inexorably growing bureaucracy is a frictional drag on all efforts to advance academic excellence. Building a stronger academic culture is challenging but by no means impossible, and it is a goal that faculty will embrace enthusiastically if they believe that the administration is genuinely committed to it. At any level of budgetary resources, a stronger culture will lead to higher academic achievement.

In addition to endorsing the recommendations of the Office of Research's Committee on Talent and Culture at Ohio State (aimed at the University overall), we offer assessments and recommenddations below, both general and specific, that are aimed at ASC in particular, with an overall emphasis on sustaining and building upon existing areas of strength, and moving resource allocation decisions closer to faculty and academic units.

## G. Recommendations About Hiring in ASC

We now turn to some general recommendations for hiring faculty in ASC. First, it is important to acknowledge that Arts and Sciences is a very diverse college. Some units require small classes (especially in the arts), others allow for very large classes, at least at the introductory level, and moderate size at the more advanced level. Furthermore, some classes and some faculty are more expensive than others either due to equipment needs, peer salaries at competing institutions, and/or the need for large start up packages. Nonetheless, a University as large and diverse as OSU must have a vibrant and excellent set of departments across the full scope of the Arts and Sciences if the University is to take its place among the Top 25 research universities in the U.S. or the Top 50 in the world.

Recommendations about hiring faculty across ASC in different departments should entail consideration of the "right size" of departments. Although our committee was charged with doing

[^9]this, we did not undertake this exercise in part due to the lack of time, and because we concluded that a consideration of the size of a department must be based on identified criteria. For example, in just considering teaching needs, one can ask if OSU wants a faculty size that permits an average course size of 20 students per class, or 100 , or a class size commensurate with the average of Big 10 universities, or with the Top 20 departments nationally, and so forth. And that is just considering undergraduate teaching without considering the size necessary to mount a high quality graduate program. Then, one can ask if average class size is the right metric for teaching or is it majors per faculty member or number of credit hours generated per faculty? Setting the right metrics and comparison points is the first step in determining the right size for teaching. But, teaching is only one factor.

More relevant to this report is the question of what is the right size a department needs to be in order to be nationally ranked or recognized? For this question, the answer depends more on the quality of the faculty than quantity. Thus, a department with 10 distinguished research professors and 10 very good professors is likely to be more highly ranked than a department with 40 average professors. But, how many distinguished professors (and across which specializations) do you need in a department to be ranked in the Top 10 or 20 or 50 ? This would require an extended study of relevant comparison departments and a consideration of exactly what OSU's aspirational goals are. In short, setting a department's right size and profile must consider not only the absolute numbers needed for teaching purposes, but also the level of distinction desired in the faculty.

It is surely true that OSU is unlikely to be ranked in the Top 10 or 20 in all of its departments, at least any time soon. Although Harvard might expect $100 \%$ of its departments to be in the Top 1020, and Michigan or Berkeley might expect $60 \%$, what is the correct number for OSU? Ohio State might want to have the same level of excellence as Michigan, for example, but what level of distinction can OSU afford? As noted earlier, OSU has previously set some lofty goals for itself without apparent consideration of the full costs that such goals entail. That is, the OSU budget (both in size and allocation) does not appear to be aligned optimally with an overall goal of increasing excellence. The question of what level of excellence OSU can and aspires to afford is ultimately one that depends on the budgetary considerations and decisions outlined above. What can be said clearly is that unless OSU devotes more funding to recruiting and retaining outstanding faculty, department reputations are not likely to increase over time but are likely to continue their downward slide. ${ }^{17}$

In the absence of an overall "right size" or "right quality" exercise, we offer the following general suggestions to maintain and enhance the reputations of ASC departments. The guiding philosophy behind these suggestions is that it makes more sense to build on strength than to create strength where there is little history or evidence of it. Of course, there will always be some exceptions to these guiding principles. For example, there may be a unit or area that traditionally has been excellent but for which the field has moved on (e.g., there are few new 'stars' or discoveries in the

[^10]area), or student interest may have waned substantially. Conversely, there may be totally new areas of inquiry or areas that have been dormant but have recently been invigorated with substantial new research talent, student demand, or link to state, national or global priorities. Considering all of these factors, programs that are or can attain excellence, satisfy student interest, and are relevant to state and national problems, have the best case to be at the top of the funding list. With those caveats in mind, some general advice for allocating resources is provided next. We first focus on general recommendations for hires in the short term (next several years) to sustain current areas of excellence as ASC is in danger of losing its core strengths. However, after reinvigorating and sustaining its most distinguished programs, we recommend in a later section that ASC develop its own excellence initiative that focuses more on innovation and hires that cut across traditional department boundaries. We also emphasize the need for a long-term hiring strategy that provides a protected funding pool for recurring targeted investments in excellence.

## G1. General Hiring Recommendations for ASC

1. Prioritize for funding those departments that are highly regarded nationally and internationally such as those that are ranked in the Top 25 in at least one national ranking system or who can provide other documentation of their high standing. For these departments with distinguished senior faculty who have already left or are about to leave, make sure that at least a third or more (depending on department needs and justification) are replaced with distinguished faculty who have at least 10-15 more years of service to give to OSU, and replace the remainder with the best available junior hires (i.e., Assistant/Associate Professors). We recommend starting with the top departments and recruiting nationally visible faculty because OSU will never attain a high ranking as a University overall if it doesn't have numerous departments at least in the Top 25 by some respected metric. Also, it is easier and less expensive to recruit the best faculty to a Top 25 department and thereby maintain that status than it is to recruit them to one that is not as highly ranked.
2. Turn next to departments that were once in but have recently fallen out of the top tier nationally and make hires to bring them back to prominence. This might involve replacing distinguished faculty with a mix of $25 \%$ senior distinguished faculty, and $50 \%$ advanced assistant or associate professors. Over the longer term, once these department reach Top 25 status, their future losses must be carefully monitored so they do not fall below Top 25 status.
3. In the longer term, and as resources permit, take some Top 25 departments and aim to move them to Top 10-15 status. This likely will involve hiring additional distinguished faculty from the outside and ensuring that the best junior faculty who have been hired do not leave for other institutions. For OSU to compete in hiring distinguished faculty and keeping our faculty from taking positions at more prestigious institutions, resources must be allocated. For example, if an OSU faculty member has an offer at Harvard or Berkeley, administrators sometimes give up. However, it is possible to retain (or attract) these faculty, but typically OSU must offer something that these universities do not. That is, to keep a faculty member in a Top 25 department from going to a Top 10 department, OSU may need to offer greater salary, or better facilities, or a more favorable teaching load, or more opportunities to easily engage in interdisciplinary teaching and research than these other universities offer. However, as OSU departments reach Top 10-15 status, it will be easier to keep these faculty by offering comparable rather than enhanced compensation.
4. For all departments, a greater degree of predictability in faculty hiring is essential to
maintaining strong programs. At the department level, different hiring plans would be appropriate if a department expects to stay at its current faculty size, or to grow or shrink. In some cases, shrinking may be the right direction, and as noted above could even be compatible with an improvement in quality, but such shrinkage should not be uncontrolled. In general, if a department is unable to replace faculty at a rate that is at least $50 \%$ of the rate of departures, then a severe downward spiral is the likely outcome. Of course, the College cannot give reliable guidance to departments unless the University in turn gives the College reliable guidance regarding its funding. In consultation with ASC leadership, the University administration should indicate whether it expects the total ASC faculty to regrow toward its size of ten years ago, to remain at its currently diminished size, or to shrink still further. Obviously, the opportunities for maintaining and expanding excellence in ASC are most feasible in the first scenario, but some degree of predictability for departments will enable them to make the best use of the opportunities that exist. In short, planning is nearly impossible when ASC and its departments don't know what resources they will have over time. Thus, it is important for the College to lay out as clearly as possible what kind of positions it will grant in searches at least over the next 3-5 years. Although the news may not be great for all units, it is better for a unit to know where it stands than to be kept in the dark year after year about what the unit may or may not be able to do.

## G2. Specific Hiring Recommendations for ASC

In order to make recommendations regarding specific hiring requests across departments, our full committee broke into five subgroups to consider the individual hiring plans for each of the departments in ASC broken into roughly similar units (e.g., languages, social sciences, etc.). Each of the subcommittees contained faculty from each of the three subdivisions of ASC. The subcommittees drafted an initial consensus report and then these reports were thoroughly vetted, revised, and ultimately endorsed by the full committee. In addition to considering the individual reports prepared by department chairs, the subcommittees also consulted national rankings and ASC data detailing enrollments, grants, and faculty numbers over time for each department. The full subcommittee reports are presented in Part II of our report. It is important to note that one thing we did not consider (as explained earlier) is the "right size" of each unit.

In brief, the individual reports identified numerous areas of strength within the College of Arts and Sciences at Ohio State. For instance, currently ranked within the Top 20 departments nationwide by either U.S. News or the Shanghai Global Index are: Communications, Geography, Political Science, Psychology, Sociology, Mathematics, and Physics. Other ranking metrics include within their Top 20 the departments of Anthropology, Astronomy, and Linguistics. Within the Top 30 by at least one respected measure are the departments of Chemistry and Biochemistry, Economics, English, History, and Statistics. This is a level of distinction of which ASC and the University should be very proud. Although the Arts and Language departments are typically not ranked by the standard sources, there is other evidence of distinction in these areas. For example, Dance is one of only four departments nationally to offer a Ph.D., and various recent departmental reviews provide evidence for high national rankings for several other departments (e.g., Art Administration, Education and Policy) as outlined in the reports in Part II. These metrics make it clear that there is strength across all of the divisions of ASC. The reports in Part II also detail particular strengths within various departments and across multiple departments (e.g., digital animation).

Our core recommendation for hiring in the short term is for ASC to focus on its documented areas of strength where there have also been significant losses in faculty over the past several years, and
where student demand also remains reasonably high. Thus, among the most dire needs we identified within the division of Natural Sciences was in Physics where a very strong department has the potential to lose up to $40 \%$ of its extramural funding over the next five years due to current and impending retirements. In Mathematics, enhanced course demands due to the increasing number of STEM majors is taxing the faculty to its limits. In the Social Sciences, there is particular urgency within Political Science and Psychology where unexpected departures and retirements are threatening the national standing of these highly ranked units. Within the Arts and Humanities, we point to a need for new faculty in Classics and shortly in Linguistics where impending retirements are also problematic. We also call for an analysis of the School of Music and what its mission can and should be with the funding available. The Departments of Design and Arts Administration, Education and Policy (AAEP) plan new degree programs pending new faculty hires that would generate new enrollments. We also encourage support of some replacement hires in the language departments where it would make them more competitive for Title VI federal funding for area study centers which are so fundamental to attaining excellence.

More detailed discussion of these recommendations and others is contained in Part II of this report. In addition to departmental hiring to maintain strength, we highlight some areas that offered potential opportunities to create distinctive and excellent new programs in emerging areas (e.g., comic studies, gravitational wave astronomy). Additional specific recommendations with the potential to enhance ASC excellence overall are also provided.

## H. Other Recommendations for ASC

Before concluding our recommendations, we offer some additional suggestions for enhancing excellence in the Arts and Sciences in general at Ohio State rather than in specific programs. We note that at least some of our recommendations cost little if anything to implement.

1. Consider a College-wide TIE program. ASC should consider a program comparable to the "Targeted Investments in Excellence" (TIE) program implemented in the mid-2000s in which the College solicits investment proposals from clusters of faculty and/or departments. These could mix PBA and cash according to need and could range from a few hundred thousand dollars to a few million dollars over a span of five years. Successful proposals would be selected based on competitive peer review. We consider this TIE model more effective than the Discovery Theme model because it is bottom-up instead of top-down. Moreover, it incentivizes faculty to develop innovative ideas and form connections across disciplinary boundaries, and it favors proposals that build on excellence that already exists at OSU rather than hoping to build it from scratch. Even proposals that are unsuccessful often have a positive impact in terms of new ideas and new collaborations, which can sometimes lead to funding from external sources. A proposal-driven process must have sufficient funding to be worth the large effort required to develop, write, review, and select the proposals. If such funding is available, bottom up proposals evaluated by a select committee is a good mechanism. However, funding for this should not replace responding to the urgent needs identified above and discussed in detail in Part II.
2. Reduce ASC bureaucracy. In our survey of chairs, many departments responded with similar comments about the ever-growing burden of the College and University bureaucracy. This is a serious problem both because of the direct cost it imposes on the time of faculty, staff, and students, and because of the large negative impact it has on retention of excellent faculty and on the College's ability to recruit department chairs who are also outstanding scholars. The

College/University Human Resources bureaucracy is especially frustrating for department chairs, and delays and seemingly arbitrary decisions have been exacerbated by the recent ASC practice of funneling nearly every personnel decision through the Chief Administrative Officer. The possible benefits of College and University practices, such as new reporting requirements and increasing centralization for "efficiency," should always be weighed against their cost in the time of faculty and staff and the loss of responsiveness as decision making moves further from those directly affected.
3. More Divisional Dean (and Chair) Autonomy. Given the size and diversity of ASC, Divisional Deans should have more authority in financial and personnel matters, and the College should minimize its second-guessing of agreements reached by department chairs and their Divisional Deans. Over the past two decades, the five colleges of the arts and sciences were merged into three and then into one mega-college with three divisions. It is not at all clear that this centralization was good for enhancing excellence in ASC. ${ }^{18}$ Ranking data over time suggest that budgetary problems and declines in departmental rankings were associated with the transition to a mega ASC college. Of course, this shift to a larger college was confounded with various other trends such as semester conversion, different admissions patterns and declining enrollments in ASC courses. Although the formation of ASC has had some benefits (e.g., reduced disciplinary silos), there have also been some costs especially in removing decision-making authority further from the ground level. In this regard, we recommend that more budgetary and decision authority be granted to Divisional Deans. Chairs report that the current decision-making structure is too often cumbersome rather than nimble. Especially with respect to hiring and retention issues, Divisional Deans who have relevant expertise need more authority to guide and shape their units, relying more on department chairs on the ground level to know where resources should go. The more decision-making authority that can be shared with or delegated to those with the greatest expertise on departmental matters (i.e., Chairs and Divisional Deans), the better.
4. New Arts Divisional Dean. Related to the issue of giving Divisional Deans more authority, the Committee believes that the Arts and Humanities Division is too large and too diverse to be effectively managed by a single Divisional Dean. Despite our general bias against growing the size and cost of the ASC administration, we believe that appointing a separate Divisional Dean for the Arts would advance the cause of excellence in the Arts disciplines.
5. Flexible travel/workshop funding. Flexible funds at the thousands of dollars levels, for workshops, performances, student or faculty travel, and so forth, are often readily available in the natural and social sciences but in very short supply in the Arts and Humanities. Providing moderate levels of flexible funding with minimal bureaucracy would have significant direct impact on scholarly activity and its visibility, and it would boost faculty morale.
6. Enhanced communication about research. ASC communications is doing a fine job of promoting stories about faculty research and student achievements. These activities should continue. Greater promotion of research excellence from University leadership would boost faculty engagement and morale throughout the University, with potentially significant impact on faculty retention.

[^11]7. More faculty recognition. Faculty awards for scholarship are valuable for recognizing and incentivizing scholarly achievement, for retaining top faculty, for positioning these faculty for external awards, and for setting a tone that scholarship is central to the College. The College and/or University should expand the number of awards that are aimed at junior and mid-career faculty.
8. More attention to diversity. Although not explicitly highlighted elsewhere in this report, we strongly encourage ASC and the university more generally to make enhancing the diversity of the faculty an important priority in all of its excellence initiatives. A diverse faculty contributes to an excellent faculty and should be one key criterion in faculty hiring and retention efforts.

## I. Conclusion

Part I of this report has focused above all on the importance of hiring outstanding faculty in the Arts and Sciences at The Ohio State University. This is because having excellent ASC faculty is the best way to enhance the overall reputation of the University. Furthermore, outstanding faculty also attract and train the best students, engage in the cutting-edge research, create the inventions, and produce the performances that attract federal and private dollars that ultimately enrich the local community, state and nation.

## Part II: Departmental Recommendations

In this section of the report we consider each of the departments in the College of Arts and Sciences at OSU and make some recommendations for faculty hiring in the short term. The departments are clustered into similar units. The report on each departmental cluster describes: (1) existing areas of excellence, (2) urgencies for hiring to maintain excellence, (3) new opportunities for investment, and in some cases, (4) additional recommendations that emerged from the cluster.

## A. The Arts Departments

(Art; Arts Administration, Education and Policy; Dance; Design; History of Art; Music; Theatre)
The Arts at OSU have the potential to elevate Ohio State's reputation and standing among academic and civic institutions. The Arts are currently at a precarious crossroads, poised to take advantage of the rich opportunities ahead, or to lose their stature, reputation and singular ability to serve as a gateway to the university for many students and citizens.

In addition, the nature of Arts teaching, as well as the standards of the federal accreditation bodies, require small classes, and often one-on-one instruction. Thus, an enrollment-based budgeting model does not work for any of the applied, studio-based arts courses across the Arts units. The Arts are unique in many respects and require targeted attention to take advantage of the opportunities they hold for Ohio State.

SBS has 8 departments; NMS has 9; Arts and Humanities has 21. Not only is this far too many for one divisional dean to manage, but more importantly, the singular nature of research and teaching in the Arts, and their intimate connections with various constituencies, require a dean and a division. For example, former Arts Initiative monies used to support public performances and exhibitions, as well as community engagement projects, have been frozen in recent years. An Arts
divisional dean should be able to access and direct these funds, rectifying the lack of departmental research support in the Arts units.

## (1) Excellence

There are no national or international rankings for performing arts or design departments. However, two OSU arts departments have national reputational rankings. Dance is widely recognized one of the top five dance departments in the nation, with its MFA degree at \#1 and one of only four doctoral programs in Dance in the nation. Art Administration, Education, and Policy (AAEP)'s 2016 review places its graduate programs at \#3 of 16 nationally. Support for these departments will maintain their current reputational ranking and excellence.

The 2016 external review concluded that History of Art was "a top flight department, poised to attain recognition as one of the most distinctive in the nation." Its strong reputation is in Modern/Contemporary Art (especially Chinese and Japanese), and early modern Mediterratlantic Art. Design, ranking \#13 in animation and \#2 for its MFA in digital animation, is implementing new programs including the eSports and Games major in collaboration with computer science and the Professional Masters in Translational Data Analytics.

The Advanced Computing Center for the Arts and Design (ACCAD) is central to collaborative research projects within the Arts and between Arts and other disciplines. Currently, four joint hires in ACCAD and Design, Dance, Theater and Music insure that technology remains a major strength of the Arts units. This center is in the national eye-and yet the lack of staffing and funding has kept it from realizing its full potential, including commercialization opportunities.

## (2) Urgencies

Most urgent. Music Schools in Research 1 institutions are like no other academic unit. A majority of vocal and instrumental performance must be taught one-on-one. Central to this ASC Excellence inquiry is whether or not OSU wants a comprehensive School of Music at the largest land-grant institution in the state. If so, then there must be a financial commitment determined through a different process than that which applies to other units on campus.

The OSU School of Music is in an escalating crisis. Adding to the loss of 8 tenure-track faculty since 2008, 5 additional TT faculty will be lost in 2018. A drastic option is to shutter graduate degree programs, retaining undergraduate degrees in General Music, Performance and Music Education, with studio courses and academic courses in Music Theory, Musicology, and Composition that service these degrees and GEs only. Is this limited mission appropriate for a School of Music in a major Research 1 institution? The committee suggests no; however, this decision must be made by the Provost and Dean who set the university's goals and control the resources that will ultimately determine whether OSU's School of Music is destined to be comparable to that at Indiana or Michigan.

Very important. Since 2008, Arts units have lost 15.2 FTE and 12 TTF. Since 2002, Art lost 2 FTEs, AAEP lost 2, Dance lost 4, Design gained 5 (with 2 joint hires), History of Art lost 6, Music lost 10 , and Theater lost 0 . Thus, the foremost need for all arts units is faculty hires. In Theatre, Dance and History of Art, this is to fill current and projected retirements in order to maintain national ranking. Design and AAEP plan to service new degree programs, generating new
enrollments. In Design, this will fill a gap in Industrial Design that has student interest (potential enrollments) which cannot be served with current faculty numbers. ART must fill positions in at least three materials/media areas. MUSIC's serious loss of faculty is addressed above.

## (3) Opportunities

Our analysis found that the Arts departments shared the following strengths that offer numerous opportunities for enhancing Arts departments and community outreach.
Community Engagement: Performing and Visual Arts are, by their very nature, outward-facing. Engagement with audiences, communities, and constituents across the campus and city lies at the heart of Arts teaching, research and service, connecting the university to wider local, regional and national conversations. Some examples include THEATER's Shakespeare and Autism Project and InterAct Theatre Project for Social Change, MUSIC's roster of community performances, DANCE's School Tour Group, and ART exhibitions of student and faculty work at Urban Arts Space. It is through Arts programming that a large segment of greater Columbus residents experiences this campus.

Professional Training for Careers in the Arts: Graduates from the arts departments are very successful in securing work in their professional fields. Design, Dance, and Music have auditions for undergraduate programs, which target promising pre-professionals through selective admissions. Music places $100 \%$ of their Music Education majors in teaching positions, Design places most of their students in jobs before they graduate, and Dance has more MFA graduates in tenure-track positions than any other dance program in the nation. The new Art and Curatorial Practice MA in History of Art promises to have the same success.

Collaboration: Collaboration is a methodology underpinning most Art practice and production. Thus, Arts researchers join with partners across the campus. Art is currently co-investigating with Chemistry, Classics, Moving Image Production, and Film studies. Art Administration, Education, and Policy (AAEP) connects with students in the Fisher College of Business and the Glenn School. DESIGN is collaborating with the department of Computer Science to launch a new major in eSports and Games, in addition to interdisciplinary programs in digital experience design, translational data analytics (data visualization specialization), and design thinking.

The following centers unite teaching, research and service in the Arts:
Barnett Center for the Arts and Enterprise: Created and sustained through generous support of the Barnett family, this center is currently without a full-time director. With necessary staff and finding, this center will make the connection between professional arts training and jobs in the public and private sector. A recent Global Arts and Humanities Discovery Theme grant will develop local and national internships for students.

OSU Arts District: Continuing support for the emerging Arts District will keep the Arts units front and center, at the official gateway to the university. THEATER and MUSIC's new buildings are scheduled to break ground this summer. Creating beautiful spaces necessitates continuing operational and academic support for the programs occupying those spaces.

Wexner Center for the Arts: The Wexner Center has established an international reputation as an innovative and intellectually important institution for the visual and performing arts, but this
reputation is largely disconnected from the university's presence in the arts. With a new Executive Director and a new Director of Performing Arts, both of whom have expressed strong interest in collaboration with the university community, there are new opportunities for engagement, in research, in performance, and in teaching.

## B. The Humanities Departments

(African-American and African Studies; Classics; English; History; Linguistics; Philosophy; Women's, Gender, and Sexuality Studies)

## (1) Excellence

The humanities departments most critical to the excellence of ASC are:

1. English: ranked \#30 out of 200 graduate English programs in the US (US News \& World Report Best Graduate Programs for 2018; MLA directory of graduate programs in English in North America). Subarea strengths: Project Narrative: \#1 graduate program; Comics Studies: \#1 graduate program; Rhetoric, Composition, and Literacy: top 2; Disability Studies: top 3; Creative Writing: top 5 programs.
2. History: ranked \#27 nationally out of the 151 top schools (US News \& World Report). Subarea strengths: Military History; Environmental History.
3. Classics: ranked $13^{\text {th }}$ (2010 US graduate programs by the National Research Council). Subarea strengths: Ancient religion; Classics and the Near East; Modern Greek.
4. Philosophy: \#28 among graduate programs in Philosophy in the United States (Philosophical Gourmet Report). Subareas: philosophy of mathematics: \#2; history of analytic philosophy: \#3; metaethics: \#9; normative ethics: \#25; seventeenth century philosophy: \#17; eighteenth century philosophy: \#7; Kant: \#15.
5. Linguistics: ranked \#8 (2017 Center for World University Rankings), \#14 of 61 in country (external review committee in 2013 and QS World University rankings). Subarea strengths: theoretical linguistics; language variation and change; computational linguistics

The Humanities chairs presented statistics on rankings, with English, History, Classics, Philosophy, and Linguistics reflecting excellence in research and teaching; they each include fields of research and graduate recruitment and teaching that rank within the top 5 in the country. WGGS reports high rankings from Academic Analytics in publications and other areas. The departmental reports also identified the importance of several centers that contribute to excellence in ASC, providing synergies by connecting research and teaching efforts across departments and even across colleges: The Center for Cognitive and Brain Sciences; The Center for Medieval and Renaissance Studies; The Center for the Study of Religion; Center for Folklore Studies; The Center for Ethics and Human Values; The Harvey Goldberg Center for Excellence in Teaching; The Center for Historical Research; Center for Languages, Literatures and Cultures. Other centers are mentioned, but without indicating cross disciplinary synergies.

## (2) Urgencies

Most critical. The most critical need is in Classics for a Latinist scholar. There is also an urgent need in Linguistics to replace several anticipated retirements so the unit can retain its very high national ranking.

Very important. Overall, Humanities chairs identified faculty hiring is the most important need-
across the Humanities disciplines. This need arises from a combination of factors, including years of not being able to grow in areas of existing excellence as well as not being able to hire after retirements. As a result of not being able to hire, humanities department chairs anticipate a drop in rankings; this would be most noticeable in Classics.

Second, Humanities chairs point broadly to a strong need for increased GTA support; without greater fellowship support and more control over this support, departments are not competitive in recruiting the top graduate students. In some cases, depending on a unit's teaching needs and student/advisor ratio, it might be appropriate for a program to choose to reduce the number of graduate students while increasing the financial support per student.

Third, Humanities chairs identify the building or enhancing of postdoctoral programs. This could serve as a pipeline for tenure-line hiring.

## (3) Opportunities

1. English: video games and Comics Studies (\#1 graduate program \& only U.S. institution that supports doctoral work) that will respectively link with eSports initiative \& Video Games major (first in the US) as well as \#1 in world Billy Ireland Cartoon Library \& Museum. This will also bolster excellence already established with Project Narrative , the \#1 graduate program in its field in the U.S., competing for top PhD students only with Stanford and Berkeley.
2. Philosophy: Philosophy of Mind \& Brain as linked with Psychology and possibly AI.
3. History: Islamic History linked to Migration Studies; link with African slave trade and diasporic histories and thus with AAAS.
4. Classics: Modern Greek as linked with theatre studies, endowed chair
5. Linguistics: Psycholinguistics and phonetics as linked with Psychology (CCBS and BLN)

The committee identified the 3 departments (English, Philosophy, and History) that made excellent cases for opportunities to build on existing areas of excellence, involving interdisciplinary linkages and programmatic/curricular innovations. Adding resources to these areas would strengthen multiple constituencies within and across departments as well as draw a more diverse body of students. Classics and Linguistics made good cases and are seen as more urgent.

Second, increased faculty hiring as per a hub and spokes model where a faculty hire in English in Comics or Video Games studies would bolster excellence in Narrative studies and research faculty at the Billy Ireland, for instance, will open opportunities for growing interdisciplinary research programs within these areas of research excellence that will also have large social impacts.

Third, a possible framework for identifying these areas for hiring would be to implement a new university-wide and thematically open Targeted Investment Initiative (TIE) that solicits proposals from the faculty. Such Targeted Investments that would create synergies and attract funding across departments could also be achieved by effective joint hires.

## (4) Other recommendations

Several factors outside/beyond departmental boundaries were identified as most critical to enhancing the excellence of multiple departments and/or ASC overall:

1. Dedicated staff for grants \& endowments for humanities; help fund graduate student professionalization in humanities units (conference travel grants); update digital and User Experience Lab; Centers; research funds for faculty. Tap famous authors for endowment (best seller and Oprah pick, J. D. Vance's Hillbilly Elegy, for instance).
2. Indirect Cost Return to PIs for external grants (ASC overall) to provide a grant incentive.
3. Reconceptualize Digital Media Studies/Lab: link to other units such as the eSports initiative and Communications.
4. Reconceptualize AAAS to link with other units (e.g., joint hires) as it builds excellence as a new PhD program.
5. Reconceptualize continuing enrollment policy. The cost to students of continuous enrollment can be an impediment to their degree attainment.
6. Reconceptualize WGSS with a new vision for excellence, including better use of the large number of affiliated faculty (e.g., with joint appointments in other ASC departments).

## C. The Languages and Cultures Departments

(Comparative Studies; East Asian Languages and Literature; French and Italian; Germanic Languages and Literatures; Near Eastern Languages and Cultures; Slavic and East European Languages and Cultures; Spanish and Portuguese)

## (1) Excellence

Individual language departments are not ranked in the usual surveys. From external reviews and other objective indicators, however, the committee concluded that the foreign language departments at Ohio State fare well in comparison with similar departments at peer institutions.

The nature of the departments reviewed forced some deviation from the standard outline. All the departments except Comparative Studies, which is commented on separately, teach multiple foreign languages as well as courses in literature and culture. As a group this cohort of departments has perhaps suffered the greatest losses in faculty over the past decade. They had 106 tenure-track faculty members in 2008; this past year they had only 83 , a loss of 23 faculty members or $22 \%$. Since the number of faculty in Slavic and East European Languages and Cultures dropped by only 1 and the number in the Department of East Asian Languages and Literatures stayed the same, the remaining four departments dropped from 76 tenure-track faculty members to 54, a decline of $29 \%$. (The decline in ASC faculty positions was $10.5 \%$. This means that four units comprising $7 \%$ of the faculty in ASC absorbed $20 \%$ of the total losses in faculty.) Because these departments are among the hardest hit by the College's recent financial troubles, and because they evidence so many similarities in their curricular and intellectual structures, these units were considered as a group rather than individually.

## (2) Urgencies

The most urgent action is needed in support of faculty positions as articulated in the first two
recommendations:

1. Excellence in the College is enhanced by the diversity of language offerings and language-andculture programs. We are therefore concerned that several smaller language-and-culture programs in these departments are threatened by the combination of demographic happenstance and poor College finances. Although OSU cannot teach every language, and not even every language in a particular geographic region, where preservation of a language and its culture contributes programmatically to a departmental profile, making it more competitive with national peers, the College ought to support faculty appointments.
2. Title VI Centers are a clear signal of excellence for the College and the University, as evidenced by universities that have been successful in obtaining center funding from the federal government. OSU currently has three area study centers - the Center for Latin American Studies, the Center for Slavic and East European Studies, and the East Asian Studies Center. Competition for federal funding takes place every four years, and the success of applications is heavily correlated with institutional investment. The College and the University must think and act more strategically in granting resources to departments, including faculty lines, that will make Ohio State competitive in applying for federal funding for Centers and in sustaining the excellence that has allowed successful application for Centers in the past cycle. Emphasis on area study centers provides a synergy among and between units and departments across campus, including language departments and units that are invested in language diversity. These kinds of synergies are central to building excellence.

## (3) Opportunities

The language and culture departments have opportunities to participate in, and even take the lead in, various interdisciplinary programs. The Department of French and Italian, for example, identifies the Global Mediterranean initiative as a focus of its efforts; the Department of Slavic and East European Languages and Cultures refers to "Migration, Mobility, and Immobility" - a Discovery Theme of the Global Arts and Humanities - as an emphasis. We believe that these initiatives, if they are broadly conceived and involve units across the College and the University, are worthy of support and should be prioritized in considering resource allocation.

The Department of Comparative Studies has a profile that is quite different from the profiles of the language-and-culture departments just discussed. It does not teach any foreign language; it does not cover any specific geographic region of the globe in its courses or research; it has several scholarly foci that are not always integrated with one another; it does not have national or international peer units at other institutions of higher education. The members of the subcommittee have differing opinions on whether the absence of a clear core discipline is a significant negative for the department or not. They agree that it houses several outstanding scholars whose work deserves support at OSU, and that it has developed imaginative and productive initiatives, essential for the future of the humanities. Comparative Studies fosters diverse research programs, makes connections across the College and the University, and develops outward-facing initiatives that go beyond the confines of the academy. Nonetheless, there may be an opportunity to reconceptualize and/or reorganize this department.

## (4) Other recommendations

1. The College should provide clearer guidance on expectations for each department's faculty hiring over a 5-10 year term; this is important for all departments, but especially for small programs where the loss of a single faculty member can mean the end of the department's presence in a field (or in a language). Larger units are often better able to adjust to the losses caused by demographic happenstance and maintain vital programs within their units. If a department has a target faculty size, then it can prioritize and may decide to give up on a particular specialty (e.g., a language offering that gives benefit to the university but attracts relatively few students). Absent the information needed to make such decisions, departments will often choose to hold onto all existing programs in the hope that better times will return. In general no department's faculty should shrink at faster than half the rate of retirements/ departures - inability to replace at least half of departing faculty members is a quick route to demoralization and a dysfunctional academic program. Establishing approximate target numbers for these units and a program whereby positions can be mortgaged against future losses in order to preserve programs and make planning more rational would contribute to maintaining and enhancing excellence in the language and culture programs.
2. The budget woes of the College have reduced even the modest support budgets for faculty members who require travel for research activities and presentations. These reductions have occurred at the departmental, divisional, and the College level. Funding for travel and research is a sound investment, and relatively small allocations can have a substantial impact. The restoration and increase of such funding will contribute not only to faculty morale, which has been understandably low because of budget reductions during the past five years, but also to the renewed emphasis on promoting faculty excellence.

## D. The Natural and Mathematical Sciences Departments

(Astronomy; Chemistry and Biochemistry; Earth Sciences; Evolution, Ecology and Organismal Biology; Mathematics; Microbiology; Molecular Genetics; Physics; Statistics)

## (1) Excellence

The nine departments in the Division of Natural and Mathematical Sciences (NMS) form the core of excellence in the hard sciences in ASC. No College of Arts and Sciences can be excellent without pockets of outstanding strengths in each of the areas represented by the NMS departments. According to at least one respected ratings group reported by department chairs, several of these departments are among the highest ranked nationally within the entire college, [Physics (\#15/257); Astronomy (\#7/40); Microbiology (\#11/125); Chemistry \& Biochemistry (\#30/248); Mathematics (\#26/181), Statistics \#27/67) ${ }^{19}$ ], reflecting a position of leadership in a broad spectrum of highly competitive research programs and excellent teaching. With one exception, the remaining departments are ranked in the top fifth to third nationally and/or internationally, and each features strong pockets of excellence: climate change, water, and geodetic science in the School of Earth Sciences; systematic biology and evolutionary and aquatic ecology in EEOB; RNA, plant and developmental / cancer / disease biology in Molecular Genetics; Bayesian methods, statistical learning, and biological modeling in Statistics.

[^12]Several Centers contribute to excellence in ASC, providing synergies by connecting research and teaching efforts across departments and even across colleges: The Byrd Polar and Climate Research Center; the Nuclear Magnetic Resonance facility in the Campus Chemical Instrument Center; the Center for Cosmology and Astro-Particle Physics straddling Physics and Astronomy; the Centers for the Exploration of Novel Complex Materials and for Emergent Materials (a NSF MRSEC) connecting Physics, Chemistry, and Engineering; the Mathematical Biosciences Institute (Mathematics, Statistics, Physics, Molecular Genetics, EEOB); the Center for RNA Biology (Chemistry, Biochemistry, Microbiology, and Molecular Genetics); and the Translational Data Analytics Institute connecting Statistics, Mathematics, and Microbiology with departments outside NMS. The Ohio Supercomputing Center (OSC) provides essential high-performance computing resources to many research programs across the university, in particular in ASC and NMS, but the recent introduction of computing fees in response to dwindling state support threatens to severely hamper some of the most excellent research programs.

## (2) Urgencies

Most urgent. All NMS department chairs declared faculty hiring as their most urgent need. This need arises from a combination of factors, including a recent period of opportunistic rather than strategic hiring that emphasized alignment with the Discovery Themes and diversity over protecting existing strengths against losses due to retirements, and over building new centers of excellence in novel, exciting (disciplinary as well as interdisciplinary) fields identified within the departments. The top-down Discovery Themes strategy has led to a situation where many departments are faced with a possible catastrophic loss of intellectual leadership and funding in disciplinary areas represented by very successful but aging faculty. Just to quote one example, the Physics Department needs to hire 10-15 faculty in the next five years to avoid shrinking their faculty by $20 \%$ and losing up to $40 \%$ of their present extramural funding; to protect their excellent research ranking and ensure at least some funding stability this needs to be dealt with urgently and proactively. Other NMS chairs report similar situations. In Mathematics, a dramatically increased demand for STEM education across the university (and across the nation!) over the last decade has engendered huge increases in delivered credit hours as well as more than a doubling of the numbers of majors. Without significant investment in instructional resources in Mathematics this is unsustainable and will negatively impact the department's research and reputational excellence.

Very important. Second to faculty hires, NMS chairs point broadly to a strong need for increased GTA support. Budget austerity has led to drastic cuts in the GTA program, threatening the quality of undergraduate education and the pipeline for filling GRA positions to support (externally funded) research programs.

A third critical need is for research infrastructure improvements funded by returning a larger fraction of Indirect Cost (IDC) to the departments and faculty generating external funding income. OSU needs to develop a "culture of excellence" which includes a climate of productivity, with the latter not measured necessarily by dollars. Measures to reward excellence and foster a climate of productivity should include returning some of the IDC directly (in the form of personal awards and contributions to their research programs) to the faculty responsible for generating it.

## (3) Opportunities

Clearly, a need for increased faculty hiring also offers great opportunities for moving research
efforts into (or starting new ones in) exciting novel fields of interest and societal importance and with strong funding prospects. These new areas can, but don't have to be interdisciplinary - the plans submitted by the department chairs include cogent ideas of both kinds. Plans for increasing excellence by targeted hiring seemed most compelling when supported by the results of recent external reviews and/or self-studies, and when focused not only specifically on the departments but also on their role within the entire College.

To identify the most promising hiring opportunities, the creation and continuous replenishing of a Targeted Investment pool should have highest priority for any ASC Excellence Initiative. A thematically open Targeted Investment Initiative would solicit proposals from the faculty on a recurring basis and allow funding of the best ideas in a competitive environment. The competition should be open to both intra- and inter-departmental proposals. An example for an interdepartmental hiring strategy that could lift all boats and might fare well in such a competition is the "hub-and-spokes" model suggested by the Department of Statistics: Recognizing the broadly increased need for working with and understanding big data sets, combined with complex modeling and advanced, computationally intensive statistical analysis tools, a strategy of joint hires with Statistics could address the particular computational and statistical needs of a range of different departments across the College. Other ideas for creating synergies and attracting funding across departments include joint hires among Astronomy \& Astrophysics and Earth Sciences in the area of Exoplanets and between Physics and Astronomy on gravitational wave astronomy, a longterm plan for a School of Life Sciences, as well as the creation of a central genomics facility advanced by the chairs of Microbiology, EEOB, Chemistry and Biochemistry, and Molecular Genetics, which would also benefit several other units in- and outside ASC.

## (4) Other recommendations

A common theme reflected in the responses from all NMS chairs are calls for measures to lift faculty morale. These range from regular ASC communications recognizing research and creative activities, the return of a percentage of IDC directly to departments and faculty, a sustained effort to nominate outstanding faculty for prestigious external awards, and very importantly to recognize the high value of faculty time by reducing the growing burden of bureaucracy and administration coming from the College and University. This can be addressed by reducing inefficiencies in the new travel policy, hiring and purchasing policies, and eliminating the pervasive second-guessing by administrative staff of faculty decisions on how to spend their budgets. Faculty report spending much more time now on such tasks than before HR, Business, and Fiscal Services were centralized in ASC. Faculty are losing prospective postdocs due to administrative delays in the hiring process resulting from long and redundant approval chains. Centralization has resulted in service providers being more remote and less engaged in the "mission" which tends to make it harder to accomplish simple things. Administrative services should support faculty and facilitate excellence rather than stand in its way. The related additional cost in faculty time is presently not included in cost assessments, thus distorting the fiscal bottom line. Efforts to decentralize decision making wherever possible would create additional flexibility in the pursuit of excellence. In the words of one NMS chair: "We should place as much value on increasing faculty productivity by $10 \%$ as we would on increasing faculty size by $10 \%$."

To better accommodate different academic cultures, departments should be given more autonomy in awarding graduate fellowships. The continuing enrollment policy and 3 credit hour rules for post-candidacy students should be reviewed, as greater flexibility would open additional
educational opportunities for students who wish to be competitive in both the academic and nonacademic job markets. The new OSC fees for academic users are perceived as particularly detrimental to the pursuit of academic excellence. IT rules that block the continued use of previously licensed software because it is no longer on the "officially approved" list should be reviewed; by seriously hampering established research programs they counter ambitions for excellence. Present practices make top research faculty reluctant to become department chairs because the time demands curtail research activity; to foster excellence in research, the College should provide adequate financial resources that allow faculty with strong research programs to not cut back on them during their tenure as department chairs. As expressed by at least one NMS department chair: "Research drives the engine of excellence, and support and increased recognition of faculty contributions to the ASC research mission will contribute to increasing excellence in moving the college forward."

## E. The Social Sciences Departments

(Anthropology; Communications; Economics; Geography; Political Science; Psychology; Sociology; Speech and Hearing)

## (1) Excellence

The social science departments at Ohio State are among the strongest units in ASC. There are several accepted and easily accessible rating systems of academic programs (e.g., U.S. News and World Report Graduate School Rankings, Shanghai Academic Ranking of World Universities, Center for World University Rankings, etc.), and it is notable that in considering the highest rank in at least one of these systems, four Social Science departments at OSU are rated in the top 10 in the nation (Anthropology [\#8]; Communications [\#1]; Geography [\#4], Sociology [\#7], and three are in the Top 20 (Political Science [\#15]; Psychology [\#11], and Speech [\#17]). Even the lowest ranked social science department is in the Top 30 (Economics [\#29]). This uniform strength in the social sciences is an important contributor to the overall reputation of Ohio State. Furthermore, the Shanghai index rates clusters of academic subjects and the social sciences (SOC) as a collective at OSU have mostly been rated in the Top 25 for the past decade, the highest rated cluster at OSU over this period (see Table 2, Part I). ${ }^{20}$

Within these highly ranked departments, anthropology is particularly well known for bioarcheology, geography for sustainability and spatial analysis, political science for international relations and American politics, psychology for social and health psychology, sociology for social stratification, economics for experimental microeconomics, and speech and hearing for audiology. Each of these departments also has emerging new areas of strength as well. Communications scholars work across the broad domain of their field and one particular area of strength was less evident.

Nearly all departments noted that various Centers and Institutes on campus were important for maintaining excellence in faculty research. Although some of these were particularly important for individual departments (e.g., Byrd Polar for Geography), those mentioned by two or more departments include: the Center for Latin American studies, the Sustainability Institute, the Institute for Population Research, the Center for Urban and Regional Analysis, the Decision Sciences Collaborative, the Mershon Center, the Translational Data Analytics Institute, and the

[^13]Center for Cognitive and Behavioral Brain Imaging.

## (2) Urgencies

In assessing the social sciences departments' current critical needs, the committee placed the departments into three categories: (1) Most Urgent, (2) Very Important, and (3) Monitor. In the most urgent category are political science and psychology. In the very important category are communications and economics. The remaining departments have not lost as many faculty as the others in recent years, but must be monitored to ensure that they do not slip in excellence.

Most urgent. Political Science is traditionally one of the strongest departments in ASC but has lost 6 faculty since 2010. It appears that its specialty in international relations is currently in solid shape but there have been critical losses in the domain of American politics, a traditional area of excellence. The department makes a strong case to rebuild in this area of strength and that this is needed to maintain their high ranking. Psychology is also a traditionally strong department whose TT faculty numbers have fallen dangerously (from 51 to 44 within the past three years with 3 additional departures announced). The department has clearly identified what hires are needed to maintain its strength. Both psychology and political science should be given a target number of hires for the next few years so they can plan accordingly to maintain excellence.

Very important. Communications is a very highly ranked department, especially in rating systems that rely on faculty productivity (e.g., number of publications). Although this department has grown in size over the past 15 years (unlike most other ASC departments), it has lost faculty in the last decade at the very time that its majors and course enrollments are increasing. Also noteworthy is that unlike other SBS departments, this department does not appear as reliant on a cadre of senior eminent faculty for its reputation (though they have some, of course), but on emerging junior faculty. It was notable that this department is an outlier on indices such as number of majors or credit hours per TTF. They need more faculty to better serve their enrollments, though this might be accomplished with hiring teaching faculty rather than TTF since it was not clear that the latter were needed to maintain excellence, the focus of this report. Economics is a solid department that aims to cover all the core areas of the field despite the fact that they have traditionally been smaller in size than their peers. This department is down to 25 TTF faculty from a high of 34 in 2011. Unfortunately, the committee did not see the likelihood that this department could move into the Top 10 or 20 without a major investment of resources that is likely impossible at this time. Nonetheless, the department's recent losses must be addressed if the department is to maintain its status within the Top 30 programs in the U.S. Falling outside this range would not serve the campus well since economics is foundational to many other programs.

Sustain and Monitor. Anthropology is a relatively small but highly ranked department and it is important for ASC for this department to maintain its strength. The department has a good focus and hiring plan, but it has not suffered the kinds of losses others have recently. Geography is a great department but also has not suffered large losses over the past few years. Sociology is a very good department that has not sustained losses that are as large as the urgent departments. Nonetheless it is important to watch out for impending retirements so this department does not slip in its rankings. Speech and Hearing is a very solid program but some questioned whether this program's clinical orientation was a good fit for ASC or whether it was a better fit for the College of Medicine. In particular, its professional masters program is very clinically oriented, though likely profit generating. This department has not sustained losses over the past decade.

## (3) Opportunities

There are a number of new and exciting opportunities for more collaboration across the social science departments on topics that run through many of them (e.g., health decision making; use of social media), but given TTF losses, it seemed more critical to shore up the fundamental core areas of these departments with faculty hires. Nonetheless, there were some important new opportunities mentioned. A potentially promising one is the development of professional masters programs in relevant units whose revenue could be used to sustain Ph.D. programs. The Geography proposal for new on-line Masters programs that could bring in large enrollments is a good possible example.

## (4) Other recommendations

Because of losses of tenure track faculty, it is essential that new hires be made for the social sciences to maintain their excellence. However, a number of other factors were mentioned across several departments that would enhance excellence college-wide including (1) streamlining centralized administrative procedures and increasing transparency, (2) providing departments more control over graduate fellowships, (3) providing more help (salary) with retaining top faculty, (4) paying more attention to spousal issues in retention cases, and (5) providing more assistance with the preparation of grant proposals (e.g., new staff).

## References

Bendtsen, D. (2013). Ohio State aims to add new faculty members through \$400M plan. The Lantern, September 11, 2013. (on-line archive)

Lorenz, S. (1999). OSU to rely on selective investment to lift national academic ranking. The Lantern, October 11, 1999 (on-line archive)

Merrill, R., \& Thompson, J. (2006). OSU invests in top research opportunities. The Lantern, July 10, 2006 (on-line archive).

Panandiker, J. (2016). Board of trustees discuss research faculty recruitment. The Lantern, January 19, 2016 (on-line archive).


[^0]:    ${ }^{1}$ It is worth noting that rankings of research or graduate university status differ from rankings based on an institution's undergraduate profile. As an undergraduate institution, OSU currently ranks number 56 overall in the U.S., and number 17 among public universities according to U.S. News and World Report: https://www.usnews.com/best-colleges/rankings/national-universities. Undergraduate rankings are based largely on the profile of undergraduates (e.g., ACT, class rank, graduation rates, etc.), whereas research rankings are based largely on the profile of the faculty (e.g., research publications, citations, honorific awards, grants, etc.).

[^1]:    ${ }^{2}$ Recall that the Shanghai rankings correlate very highly with the U.S. News Global Rankings ( $\mathrm{r}=.93$ ). Only universities ranked in four or more general categories are listed in the Table, thus excluding specialized research institutions such as UC-San Francisco and Cal Tech. Arts and Humanities rankings in Table 1 are from U.S. News because the Shanghai index does not rate the Arts and Humanities (and U.S. News does not rate the other clusters).

[^2]:    ${ }^{3}$ We do not mean to suggest that OSU should not have strong professional programs. Indeed, if OSU offers a program, it should be of high quality. We highlight these data because sometimes it seems forgotten that outstanding ASC programs are essential for the overall reputation of OSU, and more so than other programs.

[^3]:    ${ }^{4}$ We did not have rankings of the Arts and Humanities (A\&H) cluster over time. It is also important to note that the cluster rankings represent rankings of research in that cluster (e.g., publications in medical journals for MED) rather than rankings of departments or schools (e.g., School of Medicine). Thus, a university without a Medical School, for example, could still be ranked in the MED cluster if faculty from other departments publish in medical journals.
    ${ }^{5}$ Data on faculty are from an ASC University Senate report entitled, "The College of Arts and Sciences at OSU: An investment in faculty excellence" (February 16, 2019). Similar data from ASC data sources show a loss of 95 ASC faculty from 2008 to 2018.
    ${ }^{6}$ In FY15-FY17, there were 156 tenure track faculty departures in ASC and in FY16-FY18 there were 130 replacement hires. Of the 130 replacements, 45 were associated with the Discovery Theme Initiative.

[^4]:    ${ }^{7}$ The TIE program was announced as a $\$ 100$ million investment split between OAA and the colleges.
    ${ }^{8}$ Although the Chronicle of Higher Education stated that the OSU Discovery Themes initiative was a " $\$ 400$ million plan to hire 500 professors over 10 years (https://www.chronicle.com/article/The-Interdisciplinary-Delusion/244772), the current Discovery Themes website indicates an overall $\$ 500$ million investment in 200 new faculty positions (https://discovery.osu.edu/about/discovery-themes-initiative).
    ${ }^{9}$ See: https://oaa_test.org.ohio-state.edu/provost-memo-strategic-planning-2011.html

[^5]:    ${ }^{10}$ Data from: https://trends.collegeboard.org/college-pricing/figures-tables/state-local-funding-student-1000-personal-income-state-2016-17

[^6]:    ${ }^{11}$ See: https://www.chronicle.com/article/Flagship-Universities-With-the/241736
    ${ }^{12}$ A third source of revenue for academics is a University's endowment. Although OSU has a good size endowment, it is smaller on a per student basis than the Top 5 comprehensive public research universities. The same is true for grant dollars generated, a fourth source of revenue.
    ${ }^{13}$ Different sources give somewhat different tuitions for universities so for comparability, tuition data are from the College Board Trends in Higher Education: https://trends.collegeboard.org/college-pricing/figures-tables/2018-19-tuition-and-fees-flagship-universities-and-five-year-percentage-change. Percent of out-of-state undergraduates is from web searches with the lowest and highest figures observed noted.

[^7]:    ${ }^{14}$ We did not examine the RCM budget model and its allocation to colleges in any depth. Thus, it is not clear if upon conversion to this model, the ASC Present Budget Allocation (PBA) was ever rebased to reflect its total share of credit hours.

[^8]:    ${ }^{15}$ We base this on reading the excellence reports from the department chairs, discussions with numerous faculty over the years, and periodic surveys assessing faculty morale and performance of the administration distributed to the faculty over the past decade.

[^9]:    ${ }^{16}$ Available on request from the Office of Research, Ohio State University, Columbus, OH.

[^10]:    ${ }^{17}$ If it is determined that funding for faculty cannot be increased, then new models of departments may have to be considered if a goal is set to have X\% of departments in the nation's Top 20. For example, a current department that has 40 tenure track faculty ( 5 of whom are internationally distinguished) might determine that it could raise its profile by having only 20 tenure track faculty with 10 of them being internationally distinguished. This would likely mean hiring more lecturers or even tenure track teaching faculty who would have a higher teaching load than the research faculty. This type of model is one some other universities are adopting, and OSU may need to decide if it wishes to endorse this system of faculty or not.

[^11]:    ${ }^{18}$ Indeed, now that the current structure has been around for about a decade, it would be worthwhile to revisit the costs and benefits of this structure over alternatives.

[^12]:    ${ }^{19}$ Excludes biostatistics departments. For each department listed, precise ranking will vary depending on the ranking service used (e.g., Shanghai versus U.S. News), but they are generally similar.

[^13]:    ${ }^{20}$ Arts and Humanities are not ranked by the Shanghai system.

