

Report from the ad hoc Committee on Personnel Hiring Trends

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Brief Rationale and Background

The Faculty Senate committee on University Budget and Priorities has produced two five-year reports on personnel hiring trends that show ranked faculty numbers to be losing ground relative to student enrollment and all other personnel categories. These reports have raised concern in university leadership, particularly in recent times of tight or declining state appropriations. The university president would like data from which to set future hiring goals.

Purpose of the Ad Hoc Committee

The Ad Hoc Committee on Personnel Hiring Trends, in collaboration with the Chief Financial Officer and Institutional Research, investigated the amount and proportion of university personnel resources utilized since 1995. The questions guiding the committee's investigation were: Since 1995 at Missouri State University, what are the hiring trends for the eight EEO skill categories? Based on these trends, which categories should receive a priority for additional personnel resources as those resources become available?

Materials Utilized

- Reports from Committee on Budget and Priorities
- Reports, as requested, from Steve Foucart
- Personnel data set provided by Institutional Research, Megan Schiller
- Related research from various sources

An Unprecedented Collaboration

The Faculty Senate Committee on University Budget and Priorities (B&P) has examined personnel trends beginning with the five year study completed in 2011, using data from 2005 through 2010. This original study also had historic personnel data from 1993. Another five year study was completed in 2016 using data from 2010 through 2015.

The data utilized for the previous reports from B&P had limitations that undermined subsequent collaborative decision-making. Upon a request from President Clif Smart to the Faculty Senate Executive Committee, the current report is based on an unprecedented collaboration between his office, faculty, the Chief Financial Officer, and the office of Institutional Research. Because of this collaboration, the university now has a complete and consistent data set about personnel beginning with data from 2010. This data set was developed for the current study but will continue to be updated and utilized for more detailed personnel decisions. Underlying the development of the current data set is the focus on having a valid and shared basis on which to form conclusions. Faculty and administration are endeavoring to provide a foundation from which they will not argue about the validity of the data but can focus their disagreements on the interpretation and application of that data.

Limitations of Current Study

There are multiple limitations of the current study, several of which will be addressed in the recommendations for future investigation. First, the hiring issues revealed by this study are likely impacted by underfunding from statewide appropriations and/or constrained tuitions. The current study does not address the extent to which underfunding has impacted hiring trends. As a related item, the original study was intended to investigate expenditures of personnel dollars as the reports from Budget and Priorities do include personnel funding. The current study only utilizes personnel numbers (full-time employment, part-time employment, etc.), from which personnel dollars will need to be inferred.

A consistent data set is only available from 2010 to present because of changes in university information management (i.e., Banner). Additional historic data was obtained for five-year increments (1995, 2000, 2005) but that data is less consistent than the 2010-present data set. This historic data required digging through various institutional data to compile and is not in the detailed version of the 2010-present data. Calculations of full-time equivalent (FTE) employment are likely inconsistent across the 1995-2005 data utilized; calculations of full-time equivalent (FTE) employment across 2010-2017 are consistent and precise. For the historic data, part-time employees were counted as .5, with two part-time employees combined to equal one FTE. For the 2010-2017 data, part-time employment was more precise (in .10 increments), thus combinations of part-time employment to create one FTE are consistent across this data set. This calculation utilized the labor definition of part-time employment. For future investigation, the

same methods of compiling data will be utilized for 2018 and beyond. This will facilitate more accurate comparisons and valid decisions utilizing the 2010-future data.

The personnel data set for 2010-present was locked at the same point each year, i.e., October 1st. The October enrollment data was locked at a similar annual date, which is not exactly the same date but close enough for calculations of full-time employment relative to full-time enrollment. This same method is planned for 2018 and beyond.

A final limitation worth noting is the reclassification of personnel during the time period of analysis. The current study did not account for existing personnel being reclassified from one job category to another. For example, some clerical personnel may have been reclassified in such a way that their positions moved to "Technical and Paraprofessional." The macro level of analysis in this study did not include a micro investigation of such shifts. Further investigation should explore the specific positions and departments for personnel within the broad job categories.

Budget History of Missouri State University

National Trends

In the U.S., state and local support for public higher education has increased from \$85 billion in 2015 to \$88 billion in FY 2016. In addition, overall support per student FTE has increased by 3.2%; however, more states are witnessing reductions in support vs 2015. For example, student appropriations nationwide averaged \$7,116 in 2016, as compared to pre-recession level (FY 2008) which was \$8,372 (adjusted for 2016 dollars). Support per student remains currently lower than what existed pre-2008 in 44 states.

Long-term (past 25 years) nationally, the trend has been an increase in student FTE enrollment as indicated by an increase in enrollment of 41% since 1991, educational appropriations per student FTE has declined 17%. However, the Great Recession of 2008 had drastic effects on higher education and many states are still recovering in terms of FTE spending on students.

Still, in most states, state and local funding has not kept up with inflation nor enrollment growth over the long term. In fact, net tuition has increased 104% since 1991 (constant dollars). Net tuition increase has more than made up for the declines in state and local funding per student over most of the past 25 years. Nationwide, tuition has increased 35% since 2008 to an average of \$6,321.

Missouri Trends

Student enrollment in Missouri colleges peaked in 2011 at 197,890. However, between FY 2011 to FY 2016, there has been a decline of 2.6% in FTE enrollment. Pre-recession (2008), each MO FTE was supported by \$7,699 from state and local support. However, financial support has since

dropped by 22% as of FY 2016 to \$6,010. Missouri indexes at 0.86 compared to a US index of 1.00 regarding student support. Wyoming and Alaska currently lead the nation with an index of 2.53 and 1.74, respectively. Between FY 2014-15 and FY 2015-2016, Missouri raised per-student funding in higher education by \$11 as compared to Wyoming, \$1,730. Still, other states have had to decrease student funding.

The effects of lowered appropriations have not had a drastic effect on tuition. Pre-recession tuition in MO was \$5,297 after a high of \$6,078 in FY 2015, tuition has lowered to \$5,746 as of FY 2016. As of 2018, average total tuition in Missouri is \$8117.38. Missouri State University, however, is lesser at \$7,306.00 (Table 1). In recent years (2016-2018), Missouri State University has had a lower tuition than other colleges in Missouri.

Table 1. Average tuition of Missouri 4-year colleges and universities in 2018.

	Nondesignated and unrestricted per credit hour tuition	Total required fees, per semester charged to all full-time students	Total Tuition and required fees, per year, charged to a typical full-time student
2018 Average Missouri 4- year College/University	\$236.43	\$559.62	\$8117.38
Missouri State University	\$210.00	\$503.00	\$7,306.00
Difference	26.43	\$ 56.62	\$811.38

Data obtained on Dec 8, 2017 from Missouri Department of Higher Education.

All values in this section are adjusted to 2016 dollars and are obtained from SHEEO.org, 2016 on 11/13/2017.

In Missouri, between fiscal years 2014 and 2015, total government spending increased by approximately 3.9% from \$23.2 billion in fiscal year 2014 to an estimated \$24.1 billion in 2015. In fiscal year 2014, 50.9% of total tax revenues came from income taxes with sales taxes and gross receipts accounting for 43.7% of total state tax collections.

The two largest expenses for Missouri in 2015 were Medicaid and Education (K-12 and higher education) with 27.6% of state expenditures in fiscal year 2015 on education. A majority of the funds for education went towards K-12 with the remaining 4.8% allocated for higher education. Spending from state appropriations to Higher Education represented 5.6% of the budget in 2009, and 4.8% in 2013. In all, since 2008 there has been a downward trend for in state dollars spent on education in Missouri. However, numbers have begun to stabilize in recent years.

One of the challenges faced by Missouri State University and other Missouri universities and colleges is the state law capping increases in tuition (Missouri Department of Higher Education).

Under the current law, tuition can only exceed the Consumer Price Index per year. See Coordinating Board for Higher Education Policy on Higher Education Student Funding Act Implementation (<https://dhe.mo.gov/data/tuitionandfees.php>) for more details. Due to declines in state revenues and increases in other spending areas, Governor Greitens has indicated there will be a midyear budget cut for colleges and universities.

- During FY 2012, the equity distribution model for state appropriations was developed in Missouri with all higher education institutions participating in the development of the formula and approved by the Council on Public Higher Education (COPHE) and the Coordinating Board for Higher Education (CBHE). This most recent model calculated that Missouri State University is underfunded as compared to the other public universities in the state by \$16.8 million annually

Based upon the 2017-2018 academic year, Missouri State University's tuition and fees were below the average tuition and fees for Missouri 4-year public universities. Missouri State University has lower regulated financial resources compared to our peer average public universities in the State of Missouri. Lower resources have translated into more efficient use of faculty, staff and overall spending. This efficiency has not come without stress on the university environment and reduced resources have led to increased workload on our faculty and staff. Missouri State University only raised tuition from \$186.00 in 2009 to 210.00 in 2018, a difference of only \$20.00 (Stephen Foucart, CFO, Missouri State University).

MSU Presidents – Past and Present. Presented below are a series of tables including funding issues affecting funding by each Missouri State University President from 2005 to present. The lowest state appropriations were received in FY 2013; the highest were received in FY 2009.

Dr. Nietzel – 2005-2010. During President Nietzel's tenure, faculty endowed positions increased nine-fold. He also implemented the Provost Model. An effort was made to decrease personnel through an early retirement incentive; 150 employees were offered early retirement and 114 accepted.

MSU State Appropriations	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
	\$77,933,951	\$79,792,171	\$85,015,416	\$87,744,549	\$87,303,394	\$82,755,488

Dr. Cofer – 2010-2011. Dr. Cofer established budget committees including the Collegiate Budget Committee, Academic Affairs Budget Committee, Administrative Budget Committee, and Executive Budget Committee, thus allowing the University budget to be examined by all facets of the university system. During his tenure, a mid-year raise of 1.2% was granted.

MSU State Appropriations	FY 2012
	\$77,192,869

Clifton Smart 2013 to Current. Raises varied from 1.5% to 2.0% and new faculty positions were budgeted for in FY 2015, FY 2016, and FY 2017.

MSU State Appropriations	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
	\$76,962,606	\$78,365,090	\$83,947,201	\$85,192,135	\$83,148,188	\$80,899,028

Summary of Reports from Committee on University Budget and Priorities

The Committee on University Budget and Priorities completed two reports (May 2011 and May 2016) using Excel files supplied for Financial Services. The data included a record of full-time equivalent positions (FTE) and salary levels aggregated for each on-budget unit by job family. The initial report included data from 1993, 2004, and 2010. The second report included data from 2010 and 2015. Budget dollars were not adjusted for inflation. Personnel data were not adjusted to reflect changes in student enrollment.

According to these reports there was a decline in ranked faculty between 1993 and 2015 and an increase in unranked faculty during those same years. The proportion of the personnel budget invested in ranked faculty changed from roughly half of the budget (50.6%) to about one-third (35.4%). The professional category tripled in FTE (201.1 to 662.4) during that same time and the budget proportion doubled (12.6% to 25.0%). The FTE of personnel in the administrative category increased (111.5 to 146.7) but the budget percentage declined slightly (13.2% to 12.2%).

Job Category	1993 FTE	2004 FTE	2010 FTE	2015 FTE	1993 Budget %	2015 Budget %
Administrative	111.5	135.3	146.1	146.7	13.2%	12.2%
Ranked Faculty	580.5	618.3	583.2	556.7	50.6%	35.4%
Unranked faculty	77.5	107.1	211.4	195.8	4.4%	7.8%
Professional	201.1	380.4	575.3	662.4	12.6%	25.0%
Tech, Clerical, Maintenance	473.2	684.4	694.3	746.0	19.3%	19.6%
TOTAL	1443.8	1926.1	2210.3	2307.5	100%	100%

University Hiring Trends

The personnel hiring trends facing Missouri State University are symptomatic of challenges experienced across the national higher education landscape. Despite the recession in 2008, which hit many sectors of the economy hard, hiring in higher education continued at a positive pace to accommodate new students enrolling in college. Unfortunately, the majority of workers are not directly teaching students, a trend that is seen as well at Missouri State University. At the same time there has been a steady rise in the number of professional staff hirings that dilutes the pool of full-time faculty at universities. According to the Delta Cost Project (2014).

Less than half of employees at four-year, non-research institutions are faculty (full- or part-time), and at research institutions faculty account for only 25 to 30 percent of all jobs. Although there are more faculty members on campus, most of the increase is from the growing use of part-time faculty. With the exception of research universities, the proportion of all employees who were full-time faculty declined 5 to 7 percent at four-year colleges and 16 percent at community colleges between 2000 and 2012 (Delta Cost Project, 2014, p. 9).

Student-Faculty Ratio

Universities with more faculty per student have a good chance of creating an engaged and interactive teaching environment (Minsky, 2016). In exceedingly large courses, attendance tends to drop as does active participation, satisfaction, and teacher ratings. Studies in elementary and junior high schools in the USA indicated a threshold of 14 students/teacher below which student performance improved (National Assessment of Educational Progress, 2005). More attention is believed to be the key. At the college-level, student to faculty ratios around 17 to 1 or lower are generally the target (Grove, 2017). Above 20, it gets challenging for professors to provide the type of personal academic advising, independent study opportunities, and thesis oversight that can be so valuable during undergraduate years (Grove, 2017). However, colleges with 10 to 1 ratios may have first-year classes that are large and professors aren't overly accessible (Grove, 2017). Further, some schools with 20+ to 1 ratios have faculty who are entirely devoted to working closely with their undergraduate students. Typical ratios suggest students should expect 11-24 students per every teacher overall and extraneous courses should follow this pattern, while extremely common general education or lower-level major courses likely will not (CheapestColleges, 2017).

Average teacher to student ratios for college classes vary based on the academic focus of the college and the level of the course being offered. While some universities may have a low student to teacher ratio, this is not always a clear indicator of low class size and vice versa, especially since research colleges often have high faculty counts but each member may only teach one or two courses. Among the 222 ranked National Liberal Arts Colleges that provided

student-faculty ratios to U.S. News in an annual survey, the average was just 11 students per faculty member (Lowest 7-9) (Friedman, 2016). In comparison, the ratio at ranked National Universities, which offer a wide range of undergrad programs, plus master's and doctoral degrees, was 16 students per faculty member (Friedman, 2016).

Student ratios seem to be calculated in two ways, based on only faculty numbers or total staff numbers including all teachers, researchers, and support staff at the institution. Research universities tend to have low student:staff ratios. Medical schools in USA have the lowest student:staff ratios (<3, some <1). John Hopkins comes in at 3.5 staff members per every student. The Top 100 universities ranked in the world have a maximum of 9 students per every staff member. World University Rankings: 800 universities average 16.5 students per staff member in 2016 (Minsky, 2016).

Although a low student-to-staff ratio does generally imply smaller class sizes, it is only a crude estimation of how much attention individual students will receive. At least as relevant as **average class size**, which often varies by degree subject within the same university, is the **number of hours students spend with their teachers**. In most cases, the student-teacher ratio will be significantly lower than the average class size (Smith, 2011).

Overall, student faculty ratios are important, but how they are interpreted and generate opportunities for students can vary on the unique situation at any given school. Important variables include: (a) Are the faculty permanent full-time employees or not? (b) Class size can be more important than S/F ratio, what are class sizes? And (c) Is the university research or education centered? Many research faculty do not teach undergraduate courses (Grove, 2017). These types of questions are beyond the current study; they are offered here for possible future investigation.

Definitions

FTE-Personnel = Full-time equivalent (FTE) employees in 8 Equal Employment Opportunity (EEO) Skill Codes (Committee, EEO-1 Joint Reporting, 2014) were used to create common personnel categories. Personnel categories are consistent with the historic B&P Reports.

- Executive/Administrative and Managerial
- Ranked Faculty
- Unranked Faculty
- (Other) Professionals
- Technical and Paraprofessional
- Clerical and Secretarial
- Service/Maintenance
- Skilled Crafts

E-FTE = Enrollment FTE was the measure of student enrollment. Undergraduate SCH (student credit hours) were divided by 15; Graduate SCH were divided by 9; Doctoral SCH were divided by 6 in order to calculate a full-time enrollment number.

Full-time enrollment was derived from SCH (student credit hours) rather than using a head-count of enrolled students because SCH is used in university productivity reports currently utilized (since 2015). The use of SCH as the basis of full-time enrollment (FTE) will also allow more detailed examination of enrollment FTE within colleges and departments to provide specific justification for where ranked faculty would be needed. The latter examination will be beyond the scope of the current committee and report.

Student-Personnel Ratios = Student-Personnel ratios were calculated for the 8 EEO Skill codes. Thus, a ratio of students to ranked faculty would show the ratio of students per ranked faculty. The same calculation was performed for each of the 8 EEO Skills codes.

Hiring Decline = if a trend line for a personnel group is rising from the left to the right that reflects a growing number of students per employee in that category. The ratio is growing, thus, there has been a hiring decline for that personnel group relative to the growth in student enrollment.

Level Hiring = if a trend line for a personnel group is flat from the left to the right that reflects a consistent number of students per employee in that category. The ratio is not changing, thus, there has been level hiring for that personnel group relative to the growth in student enrollment.

Hiring Increase = if a trend line for a personnel group is declining from the left to the right that reflects a growing number of employees in that personnel category relative to the number of students. The ratio is declining, thus, there has been increased hiring for that personnel group relative to the growth in student enrollment.

Trend Study Methods

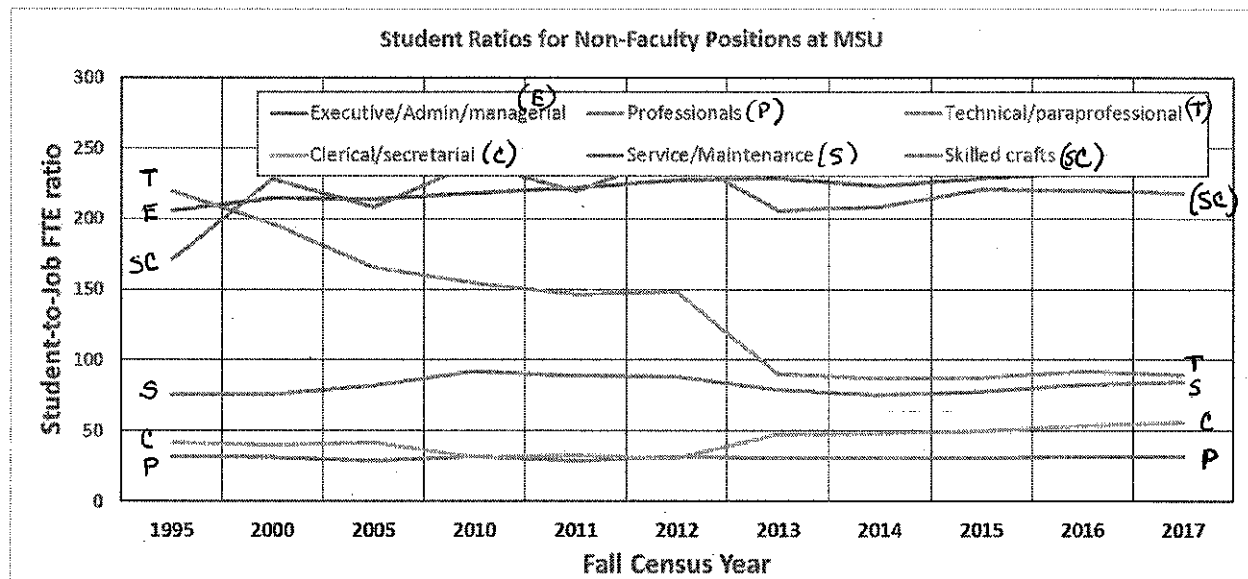
Non-Faculty Trends. A line graph (and table in appendix) that shows ratio of full-time enrolled students for the various non-faculty personnel categories in five year increments for 1995, 2000, 2005 and annually for 2010 through 2017.

Faculty Trends. A line graph (and table in appendix) that shows ratio of full-time enrolled students for ranked and non-ranked faculty in five year increments for 1995, 2000, 2005 and annually for 2010 through 2017.

MSU Hiring Trends

Guiding Question: Since 1995 at Missouri State University, what are the hiring trends for the eight EEO skill categories?

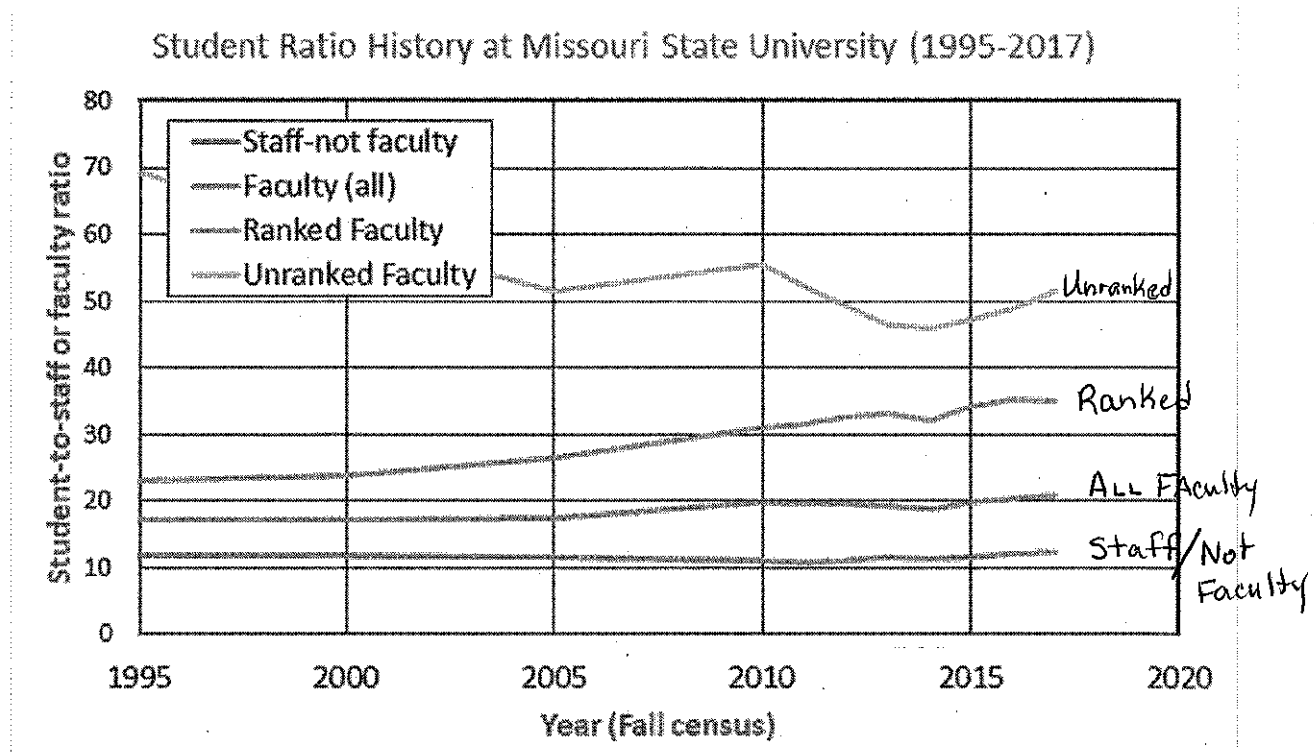
For the non-faculty personnel categories the hiring has remained level for most categories as depicted by relatively flat lines from left to right in the graph below. The most notable exception is the Technical and paraprofessionals category for which the hiring has increased dramatically since 1995. Also worth noting is the slightly decreased use of clerical/secretarial, skilled crafts, executive/admin/managerial, and service/maintenance personnel relative to increased student enrollment. Lastly, the Professionals category shows level hiring and has the lowest student ratio for a personnel category, typically 31 full-time students per staff member.



For faculty, both ranked and unranked, the student ratios reveal that hiring has been declining relative to increases in student enrollment. In the next graph, the staff/non-faculty line is flat, indicating level hiring across personnel categories relative to increases in student enrollment. The all faculty line, however, shows a noticeable decline in hiring relative to increasing student enrollment. In 1995 there were 12 students for every non-faculty employee of MSU; there were 17 students for every faculty employee. In 2017, there were 12 student for every non-faculty employee, however, there were 21 students for every faculty member (ranked and unranked combined). This clearly shows that hiring of faculty has not kept pace with increases in student enrollment.

When ranked and unranked faculty are separated for the analysis, the pattern reveals a strong use of unranked faculty rather than ranked faculty in order to address growing student enrollment. In 1995, the student ratios were 22.9 (ranked), 69.3(unranked), 17.2 (total teaching). In 2017, those

ratios were 34.9 (ranked), 51.6 (unranked), and 20.8 (total teaching). The FTE of ranked faculty has remained relatively unchanged since 1995; the highest FTE of ranked faculty was 600 in the year 2000, the lowest was 527.9 in 2012. The 2017 data include 556.9 FTE of ranked faculty. (For further detail please see the attached pdf files)



Observations from 2010-2017 data

The following observations were derived only from the 2010-2017 data, which was consistently documented across each of these years. The attached pdf files provide the numerical foundation for these observations.

Personnel Growth:

- Overall, personnel FTE grew 96.5 from 2010 to 2017.
- FTE in “Technical and Paraprofessional grew 105 from 2010 to 2017. Thus, nearly all of the personnel growth during this time frame was in the Technical and paraprofessional category.
- There is a noticeable increase in Unranked Faculty from 2010 to 2017 (310 to 377).

Personnel Decline:

- There has been a dramatic decline in personnel FTE in the Clerical and Secretarial category. This category is down 206 FTE from 2010 to 2017.

Inadequate Hiring:

- The FTE for Ranked faculty remained virtually unchanged from 2010 to 2017, thus the student ratio worsened (due to growing enrollment). In 2010 there were 31 students per ranked faculty; in 2017 there are 35 students per ranked faculty.
- The FTE of Executive/Admin and Managerial has changed only slightly (from 79 to 81.5 FTE). This growth has been slower than the growth in enrollment.

Personnel Proportions for 2017:

- The highest FTE is in the Professionals job category (609.4)
- The second highest FTE is in Ranked Faculty (556.9)
- The remaining FTE per category are:
 - Unranked Faculty (376.8)
 - Clerical and Secretarial (367.7)
 - Service/Maintenance (230.7)
 - Technical and Paraprofessional (216.8)
 - Skilled Crafts (89.0)
 - Executive/Admin and Managerial (81.5)

Recommendations for Personnel Prioritization

Guiding Question: Based on the personnel trends, which categories should receive a priority for additional personnel resources as those resources become available?

When personnel resources become available the personnel category of ranked faculty should receive priority. This category demonstrated the most dramatic deficiency in hiring when considering the changes in student enrollment. The category of Technical/Paraprofessional demonstrated the highest amount of hiring during the time period of this study. The largest personnel category is "Professional"; this category currently has a higher FTE than all other categories, including ranked faculty. When personnel resources become available the Technical/Paraprofessional and Professional personnel categories should be given a lower priority for additional personnel resources. Furthermore, when there are voluntary departures from these job categories the university should strongly consider reallocating those personnel resources to the ranked faculty category because of the deficient hiring in that category. The committee recognizes, based upon the data reviewed in this study, that Missouri State University does not have excessive staffing in any personnel category. Increased funding to the University will be key to providing new personnel positions, with additional ranked faculty as a priority.

Future Investigation

For our next level of investigation we need to know:

- What sub-types of personnel are in the “(Other) Professionals” category (as they outnumber ranked faculty)?
- What sub-types of personnel are in the “Technical and Paraprofessionals” category (as they have experienced FTE growth while other job categories are either flat or in decline)?
- Given declining state appropriations and a history of low state appropriations, to what extent does underfunding impact the personnel hiring trends at MSU?
- How do the hiring trends at MSU compare to nationwide trends? Trends at various levels of universities?
- How should the charge to the Committee on University Budget and Priorities be adjusted so the personnel data set resulting from this study can continue to be used for collaborative investigation and decision-making?

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Appendix 1. Personnel Categories used for MSU [Derived from Equal Employment Opportunity (EEO) Skills Categories (Committee, EEO-1 Joint Reporting, 2014)]

1. Executive/Administrative and Managerial

Management Policies or general business operations of the institution, department or subdivisions within. Degree Needed - Baccalaureate degree or greater

Derived from EEO category: Officials and Managers, which has two sub-parts.

2. Ranked Faculty

Tenure track professor, associate, and assistant

3. Unranked Faculty

Instruction, research, or public service. Non-tenure track professors, associate, and assistant; instructor

4. (Other) Professionals

Academic and institutional support; Persons employed for the primary purpose of performing academic support, student service, and institutional support.

Derived from EEO category: Professionals.

5. Technical and Paraprofessionals

Includes persons who perform some of the duties of a professional in a supportive role as technicians or assistants.

Derived from EEO category: Technicians

6. Clerical and Secretarial

Used to classify persons whose assignments typically are associated with clerical activities or are specifically of a secretarial nature.

Derived from EEO category: Administrative Support Workers

7. Service/Maintenance

Includes persons who perform duties that result in or contribute to the comfort, convenience, and hygiene of personnel and the student body or that contribute to the upkeep of the institutional property.

Derived from EEO categories: Service Workers, Operatives, and Laborers/Helpers.

8. Skilled crafts

Occupational titles such as welders, cutters, bookbinders and bindery workers; printers; plant and system operators; stationary engineers and boiler operators; water and liquid waste treatment plant and system operators; painting workers.

Derived from EEO category: Craft Workers

MSU SCH Ratios 1995 - 2005

Full Time and Part Time FTEs combined	Ratio 1995	Sum of FTE	Ratio 2000	Sum of FTE	Ratio 2005	Sum of FTE
Executive/Admin and managerial	205.6	65.0	214.3	67.0	213.8	72.0
Total Teaching FTE	17.2	776.0	17.1	840.0	17.5	877.5
*Ranked Faculty	22.9	583.0	23.9	600.0	26.6	578.0
*Unranked Faculty	69.3	193.0	59.8	240.0	51.4	299.5
Specialist/Support (Full Time and .5 for Part Time)	31.7	422.0	31.1	462.0	28.5	540.0
Technical and paraprofessional (Full Time and .5 for Part Time)	219.1	61.0	196.7	73.0	165.5	93.0
Clerical and secretarial (Full Time and .5 for Part Time)	41.5	322.0	39.9	360.0	41.5	371.0
Service/Maintenance (Full Time and .5 for Part Time)	75.9	176.0	75.6	190.0	81.9	188.0
Skilled crafts (Full Time and .5 for Part Time)	171.4	78.0	227.9	63.0	208.1	74.0
Grand Total	5.0	2676.0	5.0	2895.0	5.0	3093.0

*For this table archival data were used. Assistant Professors, Associate Professors and Professors were considered 1.0 FTE each and were listed as Ranked Faculty. All other teaching staff were considered Unranked Faculty.

Ratio = Student Credit Hours / Full Time Equivalents

Full Time and Part Time FTEs combined	2010		2011		2012		2013	
	Ratio 2010	Sum of FTE	Ratio 2011	Sum of FTE	Ratio 2012	Sum of FTE	Ratio 2013	Sum of FTE
Executive/Admin and managerial	218.0	79.0	222.1	77.0	227.2	75.8	228.5	77.0
Total Teaching FTE	19.9	864.1	19.7	868.0	19.6	876.7	19.3	910.0
Ranked Faculty	31.1	554.1	31.6	540.4	32.6	527.9	33.1	531.1
Unranked Faculty	55.6	310.0	52.2	327.6	49.4	348.8	46.4	378.9
Professionals	31.7	543.6	28.9	591.1	31.6	545.1	30.8	571.7
Technical and paraprofessional	154.4	111.5	146.6	116.7	148.0	116.4	89.7	196.0
Clerical and secretarial	31.1	554.1	32.5	526.9	30.9	558.0	47.1	373.7
Service/Maintenance	91.6	188.0	89.1	192.0	88.3	195.0	79.1	222.5
Skilled crafts	239.2	72.0	219.2	78.0	246.0	70.0	205.7	85.5
Grand Total	7.1	2412.3	7.0	2449.5	7.1	2437.0	7.2	2436.3

Full Time and Part Time FTEs combined	2014		2015		2016		2017	
	Ratio 2014	Sum of FTE	Ratio 2015	Sum of FTE	Ratio 2016	Sum of FTE	Ratio 2017	Sum of FTE
Executive/Admin and managerial	223.1	79.0	228.9	80.5	232.5	82.8	238.4	81.5
Total Teaching FTE	18.9	932.9	19.8	931.0	20.5	939.9	20.8	933.7
Ranked Faculty	32.2	548.2	34.1	540.1	35.3	545.5	34.9	556.9
Unranked Faculty	45.8	384.7	47.1	390.9	48.8	394.4	51.6	376.8
Professionals	30.8	572.5	30.6	602.2	32.0	602.1	31.9	609.4
Technical and paraprofessional	87.0	202.5	87.4	210.8	91.6	210.1	89.6	216.8
Clerical and secretarial	47.7	369.6	50.1	368.2	53.6	359.4	55.9	347.7
Service/Maintenance	75.0	235.0	77.6	237.5	82.6	233.0	84.2	230.7
Skilled crafts	208.0	84.7	220.8	83.5	220.1	87.5	218.3	89.0
Grand Total	7.1	2476.3	7.3	2513.7	7.7	2514.6	7.7	2508.8

Ratio = Student Credit Hours / Full Time Equivalents