

University of Arizona Preliminary Examination into Faculty Workload

September 2021

Contents

SECTION I: EXECUTIVE SUMMARY	3
Introduction	3
What we learned and what we still need to know	3
Key Takeaways	3
Overview	4
Data Limitations	4
Data Observations	4
2011-2020 Faculty Count, Teaching and Research Trends	4
Student Credit Hours	5
Peer Institution Comparisons: Student-Faculty Ratios, Enrollment, and Research	5
Summary	5
Future Considerations	6
SECTION II: BACKGROUND AND DEFINITIONS	8
Brief description of faculty tracks	8
What is faculty workload?	
SECTION III: TABLES AND FIGURES	
Table 1: Faculty Headcount and FTE over 10 Years, 2011-2020	12
Table 2: Student Credit Hours (SCH) Over 10 Years, 2010-2020	16
Table 3: 2019 Student Credit Hours by Faculty Track	16
Figure 1: Faculty Headcount by Track Over 10 Years, 2011-2020	
Figure 2: Research and Development Expenditures, 2010-2023	
Figure 3: Undergraduate Enrollment, 2010-2023	
Figure 4: Graduate Enrollment, 2010-2023Figure 5: Student to Tenure Track Faculty Ratios for Peer Institution Comparisons	
Figure 6: Student to Tenure Track Faculty Ratios for Peer Institution Comparisons	
Figure 7: Key Take-Aways for UA Rankings Compared to 83 Benchmarking Institutions	

SECTION I: EXECUTIVE SUMMARY

Introduction

What we learned and what we still need to know.

During the pandemic, faculty burnout and faculty workload inequities have been a key point of discussion and concern. Greater understanding and awareness of how faculty workload is distributed (across teaching, research/scholarship/creativity activity, service, extension, clinical, and other activities) can provide insight into faculty retention strategies. Knowledge of faculty workload distribution can also provide important insights into how the university is fulfilling its mission to educate and innovate.

This report is a preliminary examination in understanding faculty workload within our university and across faculty tracks. There is no existing institutional database for faculty workload. Data for this report were pulled from existing datasets including UAVitae, UAccess, and IPEDS.

Key Takeaways

- Workload Breakdown: UAVitae as part of annual review has some data on faculty
 workload breakdown; however, this data is not complete for all faculty and is not validated by
 department heads. Findings from UAVitae demonstrate the wide variation in faculty
 workload.
- **Count**: Total number of faculty have increased in the past 10 years by 23%, but FTE only increased by 14%.
 - Career-track faculty began in 2019 and adjunct faculty have proportionately decreased since that time.
- **Teaching:** Student enrollment has increased steadily and Student Credit Hours (SCH) have increased steadily. Multi-year contract career-track faculty teach the highest rates of SCH.
- Research: faculty research has grown steadily.
- **Peer Comparisons**: Student to faculty ratios are similar to peer institutions, yet we rank 13 or 14 out of 16 peers.

There is a continued need to consider the balance between efficiency and burden on faculty. It is recommended to consistently document and track workload for faculty by track and to examine possible inequities by gender and race/ethnicity, which were not available in the current data.

In the future, there is a need to track faculty workload patterns for transparency, clarity, credit, and accountability. Regular analysis will allow examination of potential inequities. The distribution and proportion of workload is used for faculty annual review and promotion/tenure reviews, and thus, accurate workload information is essential to faculty advancement.

Overview

Faculty workload represents contributions to the university in six major categories: (1) Research / Scholarship / Creative Activity, (2) Teaching, (3) Service / Outreach, (4) Clinical Service, (5) Administrative Service, (6) Extension, and (*) Other Professional Activities. (The latter is typically only used by continuing status track faculty based on specialized job descriptions.)

As at other research-intensive universities, tenure-track faculty have historically been assumed to carry a "40-40-20" workload (meaning 40% research / scholarship / creative activity, 40% teaching, and 20% service). For career-track faculty, the workload assignments vary widely also, depending on title and responsibilities. That said, our current data are incomplete and inadequate for a meaningful analysis of workload for our career-track faculty. **Based on 2019 data from UAVitae, however, only 28% of tenure-track faculty reported a 40-40-20 workload assignment.**

Data Limitations

Currently, there is no one source of accurate data for faculty workloads at UArizona. As such, data were pulled from existing archival datasets to compile this report. Data sets include UAVitae, UAccess, and IPEDS. It should be noted that these databases have not been well-aligned in the past and as such the total number of faculty counts are not the same across all the datasets. UAVitae data is entered directly by faculty and we utilized the 2019 reporting period. UAccess data is institutional data that covers a 10-year span. IPEDS data and comparison to peer institutions covers a seven-year span.

There are important differences between colleges and across disciplines. In the current report we do not examine differences between colleges; rather since this is the first report of its kind we focus more on understanding the broader strokes of workload data in order to get a baseline of understanding and future comparison for further detailed examination at the unit level.

Data Observations

2011-2020 Faculty Count, Teaching and Research Trends

- The number of faculty (i.e., head count) increased steadily from 2,763 in 2011 to 3,408 in 2020. The faculty full-time-equivalent count (FTE) also increased over that same period, rising from 2,300 (2011) to 2,620 (2020,) but not at the same rate as headcount. (Table 1).
- Career-track (CT) faculty positions were first established at UArizona in 2019, and, as many
 adjunct faculty have moved into CT positions with more stability and promotion opportunity, it
 is not surprising that adjunct appointments have decreased since this time (See Figure 1).
- There were steady increases in student enrollment during 2011-2020, especially since 2015 (see Figures 3 & 4).
- During this same time, research expenditures were flat from 2011 to 2017, and have been on the rise since 2018. (See Figure 2).

Student Credit Hours

- Total number of Student Credit Hours (SCH) increased steadily from 2011 to 2017 with only a slight decrease from 1,054,426 to 1,033,160 in the last four years, even with the increase in student enrollment during this same time. (See Table 2)
- In 2019, tenure-track and annual contract career-track faculty delivered similar medians of SCH (163 and 191, respectively). (See Table 3).
- In 2019, multi-year contract career-track faculty had the highest median SCH at 598. (See Table 3).
 - Multi-year contracted faculty have slowly increased since 2014, with a total of 122 in 2020. To learn how to set up multi-year appoints go to: https://facultyaffairs.arizona.edu/multi-year-appointments-career-track-faculty

Peer Institution Comparisons: Student-Faculty Ratios, Enrollment, and Research

- UArizona ranked 14th out of 16 peers in 2018-2019 for student to tenure-track faculty ratio. Over the seven-year period 2012-2019, ratios increased somewhat from 2013 to 2014 and then leveled off, followed by a slight decrease in 2018-19. (See Table 4 and Figure 5).
- UArizona was 13th out of 16 peers in 2018-2019 for student to all faculty ratios. For UArizona this ratio had been increasing until 2014 and then began decreasing in 2016 (see Table 5 and Figure 6).
 - It is common among all peer institutions to have a lower student to faculty ratio when all types of faculty are included, not only tenure-track faculty. UArizona is no exception in this regard.
- We remain at the top among 83 benchmarking institutions (public, four-year degree granting, \$100 M in research and more than 20k enrollment) for comparisons in 2019 . . .
 - 14th for undergraduate fall enrollment (See Figure 7)
 - 26th for graduate fall enrollment (See Figure 8)
 - o 17th in research and development expenditures (See Figure 9)

Summary

It is important to note that while faculty headcount increased over the past 10 years by 23%, faculty FTE only increased by 14%. This means that that while there are more individual faculty there is not much change in amount of institutional FTE devoted to teaching, and this was true during a period of rapid increase of students. This may have significant implications for faculty stress.

Of particular interest is faculty teaching workload, which can provide important insights for distribution of teaching load as well as insights for university decision makers on how we deliver curriculum. Similarly, the student-faculty ratio and student credit hours delivered per faculty helps to

understand student access to faculty in classrooms as well as outside of classrooms, during office hours, or for mentoring.

Compared with our peers we tend to have high rates of student-faculty ratios which may contribute to higher stress among faculty who are juggling teaching and mentoring with trying to retain the same levels of research / scholarship / creative activity output, as required for promotion and tenure reviews. When examining student-faculty ratios for only tenure-track faculty, UArizona is closer to the mid-range over time; thus, external reviewers for promotion are likely to have comparable workloads. Yet it will be important to keep an eye on any changes to student-faculty ratios and comparison with peer institutions for purposes of promotion and tenure reviews. It is important to understand the trends of UArizona in relation to peer institutions for a host of reasons, including promotion evaluations, and student recruitment.

Future Considerations

Existing studies indicate that BIPOC (Black, Indigenous, and People of Color) women faculty often are assigned more new course preps and have more service courses with larger enrollments, giving them heavier teaching loads (Pittman, 2021). In order to retain BIPOC women there is a need to consider inequitable teaching loads through regular monitoring and adjustment of course considerations (Pittman, 2021). Others argue that in order to effectively address inequitable workloads there is a need to provide department head training and also to create transparent dashboards to examine differences in service/research/teaching duties (Reddick, 2021). In a report on equity-minded workloads by the American Council on Education (O'Meara, Culpepper, Misra & Jaeger, 2021), transparency of data is the first step to improving workload equity, along with clearly identified and well-understood benchmarks for faculty work activities. Thus, a key recommendation is to consistently document faculty workload within institutional human resource systems.

Findings from the Faculty Workload and Rewards Project and NSF Advanced funded project (O'Meara, Culpepper, Misra & Jaeger, 2021) provide the following list of steps to ensure faculty workload equity:

- 1. Transparency departments have widely visible information about faculty work activities available for department members to see
- 2. Clarity departments have clearly identified and well-understood benchmarks for faculty work activities
- 3. Credit departments recognize and reward faculty members who are expending more effort in certain areas
- 4. Norms departments have a commitment to ensuring faculty workload is fair and have put systems in place that reinforce the norms.
- 5. Context departments acknowledge that different faculty members have different strengths, interests and demands that shape their workloads and offer workload flexibility to recognize this context
- 6. Accountability departments have mechanisms in place to ensure that faculty members fulfill their work obligations and receive credit for their labor.

Recommendations for next steps are

- 1. To annually track faculty workload for all faculty that is validated by department heads.
- To provide guidance for department heads about how to use faculty workload databases at the unit level to determine decisions about teaching and research resources.
- 3. To determine allotment of internal service responsibilities.
- 4. To provide analysis of faculty workload every other year to examine faculty equity and potential for burnout.

References:

O'Meara, K., Culpepper, D., Misra, J. & Jaeger, A. (2021). Equity-minded workloads: What we can and should do now. American Council on Education.

Pittman, C.T. (2021). Colleges must change to retain BIPOC women. Inside Higher Education. April 30, 2021. https://www.insidehighered.com/advice/2021/04/30/retain-bipoc-women-faculty-colleges-must-remove-obstacles-they-face-opinion

Pittman, C.T. (2021). The Overlooked Minefield. Inside Higher Education, April 16,2021. https://www.insidehighered.com/advice/2021/04/16/teaching-issues-can-be-among-biggest-obstacles-retaining-bipoc-women-faculty

Reddick, R.J. (2021). Want to combat the 'Privilege Payoff'? Here's how: Inequitable workloads persist across lines of gender and race when they don't have to. Chronicle of Higher Education. May 10,2021. https://www.chronicle.com/article/want-to-combat-the-privilege-payoff-heres-how?cid2=gen_login_refresh&cid=gen_sign_in&cid2=gen_login_refresh

SECTION II: BACKGROUND AND DEFINITIONS

Brief description of faculty tracks

There are several different types of faculty employment tracks and each have variations in workload expectations and promotion expectations. Different tracks have different primary responsibilities.

Faculty members means employees whose Notice of Appointment incorporates the Conditions of Faculty Service (ABOR-PM 6-201, et seq.). Faculty members include instructors, lecturers, senior lecturers, principal lecturers, assistant professors, associate professors, professors, professors of practice, research professors, clinical professors, Regents' Professors, or any other employees who otherwise are designated in their Notice of Appointment as holding a faculty position. Faculty members are responsible for the teaching, research, and public service goals and objectives of the University. Faculty members may be tenured, tenure-eligible, career-track, visiting, or adjunct. Any person appointed to a faculty position designated as "visiting," "adjunct," "research," "clinical," or such other title(s), will not be tenured or tenure-eligible and will have no expectation of continued employment beyond the end of his or her current appointment period.

Tenure-track faculty means members of the faculty who are on an employment track that indicates a mandatory year for review for tenure. Faculty who are granted tenure expect to have their appointment for successive periods; UHAP Chapter 3 policies apply to their review and reappointment. It is common that tenure-track faculty are engaged in research/scholarship/creativity activity, teaching and service.

Continuing status track academic professional employees means members of the faculty who are on an employment track that indicates a mandatory year for review for continuing status. Faculty who are granted continuing status expect to have their appointment for successive periods; UHAP Chapter 4 policies apply to their review and appointment. Continuing status faculty have job description each year that summarizes their job expectations and contributions within their unit. It is still common that continuing status track faculty typically do not engage in teaching as a significant portion of their workload.

Career-track faculty means those members of the faculty who have annual contracts or multi-year contracts (no more than 3 years). Career-track faculty have promotion opportunities, but no mandatory years for retention reviews or reviews for certain ranks. They are not eligible for tenure, or continuing status and do not have visiting, adjunct, or global titles. "Career track" is also not used with courtesy or joint titles, as these are secondary titles that do not constitute promotion pathways. There are several types of career-track faculty.

- Clinical Professors are career-track faculty who have established themselves by professional
 experience and expertise over a sustained period of time to be qualified to teach or manage
 practicum, internship, or practice components of degree programs. Their primary responsibilities
 include teaching or managing students in the practice requirements of their degree programs in
 a manner that advances the educational mission of the University in a significant or substantial
 way.
- Instructor means career-track faculty whose primary responsibility is teaching undergraduate or clinical courses. Instructors do not have a promotion series within this title structure.

- Lecturers, Senior Lecturers, or Principal Lecturers means career-track faculty whose Notice
 of Appointment incorporates the ABOR Conditions of Faculty Service (ABOR-PM 6-201, et seq.)
 who are career-track, visiting, or adjunct faculty, and whose primary responsibility is teaching
 undergraduate or clinical courses.
- Professors of Practice means career-track faculty who have established themselves to be
 qualified professionals in an area of practice or discipline either by expertise, achievements, and
 reputation over a sustained period of time and/or by scholarly qualifications. The primary
 responsibilities of this position include the practice of teaching and mentoring students in a
 manner that advances the educational mission of the University in a significant or substantial
 way and may also include (1) service, (2) land-grant outreach, and/or (3) research, creative
 work, and scholarship.
- Research Professors means career-track faculty who have established themselves by
 expertise, achievements, and reputation over a sustained period of time to be distinguished
 scholars and researchers. The primary responsibilities of such employees are to engage in, be
 responsible for, or oversee a significant area of research or scholarship in a manner that
 advances the mission of the University in a significant and substantial way.

Career-track faculty may have multi-year appointments, but the majority are on annual renewal contracts. Multi-year appointments can only comprise a certain proportion of the faculty. This criterion equates to 15% of the total number of tenure-track faculty at the University according to Arizona Board of Regents (ABOR) standards. Calculation of the 15% is at the university level not the unit level.

 Multiple-year Appointment means an appointment to a faculty position as a lecturer, senior lecturer, or principal lecturer, assistant/associate/full professor of practice, assistant/associate/full research professor or assistant/associate/full clinical professor, or an appointment as an academic professional employee for a period longer than one academic or fiscal year but not more than three academic or fiscal years.

Adjunct is a modifier used with faculty titles that are not eligible for tenure or continuing status. Adjunct means a position is temporary in nature or is at a reduced FTE. Adjunct should generally not be used for full fiscal or academic year appointments that are reasonably expected to extend beyond a single year, though units have discretion whether or not to use adjunct when such appointments are at less than .75 FTE. Adjunct may not be used for full academic or fiscal year appointments at .75 FTE or greater.

What is faculty workload?

Faculty workload represents the breakdown of responsibilities for faculty into primary areas that demonstrate their contributions to the university. Workload is broken down for all faculty into six major categories that are listed below. Workload categories are based on percentages that sum to 100%. Faculty and their department head agree on the percentage breakdown in terms of where faculty devote their time to each area. This is typically set at the original point of hire in the offer letter to faculty. Faculty workload tends to be consistent from year to year; however, at certain times it may be adjusted due to sabbatical, grants/awards, temporary alternative duty assignment, or departmental needs. Most tenure-track and continuing status-track faculty are employees at 1.0 FTE. Career-track faculty should be at least .75 FTE or higher, and adjunct faculty should be .50 FTE or lower.

Traditionally at U.S. R1 higher education institutions, tenure-track faculty have had a 40-40-20 workload, which represents 40% teaching, 40% research/scholarship/creative activity, and 20% service (unit, university, discipline, local and global communities). This workload may vary somewhat across disciplines, but it often varies quite a bit across faculty tracks. For example, career-track faculty who primarily teach often have a much higher teaching workload and very low workload for research/scholarship/creative activity or for service. Research professors or continuing status track faculty often have very low teaching workload expectations if at all.

Details of workload categories vary by college and by unit-level discipline. See link for promotion criteria by college: https://facultyaffairs.arizona.edu/promotion-criteria
Below broad descriptions are provided, and as such workload may include the following:

Research/Scholarship/Creative Activity

Examples may include but are not limited to: publications, books, grants, exhibitions, creative activity, performances, patents.

Teaching

Examples may include but are not limited to: teaching classes, developing curriculum, mentoring students, overseeing graduate student projects.

Service/Outreach

Examples may include but are not limited to: peer reviews (journals, books, grants), leadership in national organizations, local and global community service as an expert in their field, internal university service (department, college or university level).

Clinical Service

Examples may include but are not limited to: clinical teaching, clinical work with patients.

Administrative Service

Examples may include but are not limited to: administrative positions within the institution, such as department head, assistant/associate dean.

Extension

Examples may include but are not limited to: activities done within cooperative extension, which may include contracts, public facing education or projects.

Other Professional Activities

This category is typically only used by continuing status track faculty who have job descriptions and duties that are updated annually.

Use of Workload for faculty evaluation:

Annual reviews are scored based on each portion of workload as well as an overall score. Annual reviews are important for consideration of merit raises, award nominations, and also identify any areas of concern due to lack of productivity that may lead to faculty development plans or performance improvement plans.

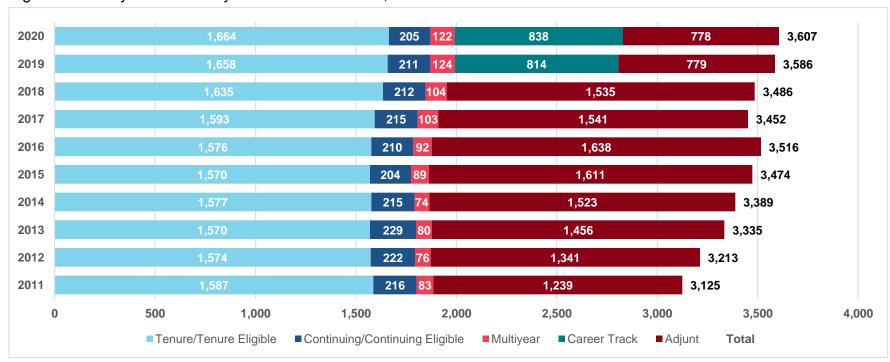
Promotion and tenure review is primarily guided by workload distribution, as such it is the second page of the dossier. Given the importance of external reviews for tenure-track faculty, it is expected that workload expectations are similar to faculty in peer institutions. Effective review of dossiers for promotion or tenure by external reviewers is predicated on the assumption of a similar workload distribution across peer institutions. If tenure or continuing status is not granted, then faculty must leave their position in one year and cannot be rehired by the University of Arizona. Ranks and tenure are linked with eligibility for certain awards (local, national, international) and with certain grant eligibility.

SECTION III: TABLES AND FIGURES

Table 1: Faculty Headcount and FTE over 10 Years, 2011-2020

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
FTE	2,300.21	2,366.78	2,383.43	2,432.86	2,551.40	2,444.76	2,465.94	2,499.38	2,520.80	2,620.37
Headcount	2,763.00	2,887.00	2,972.00	3,067.00	3,117.00	3,058.00	3,091.00	3,133.00	3,184.00	3,408.00

Figure 1: Faculty Headcount by Track Over 10 Years, 2011-2020



Note: Career-track faculty titles were voted into policy for the first time in 2018. As such, many individuals who were previously consider adjunct faculty were moved to career-track titles beginning in 2019.

Figure 2: Research and Development Expenditures, 2010-2023

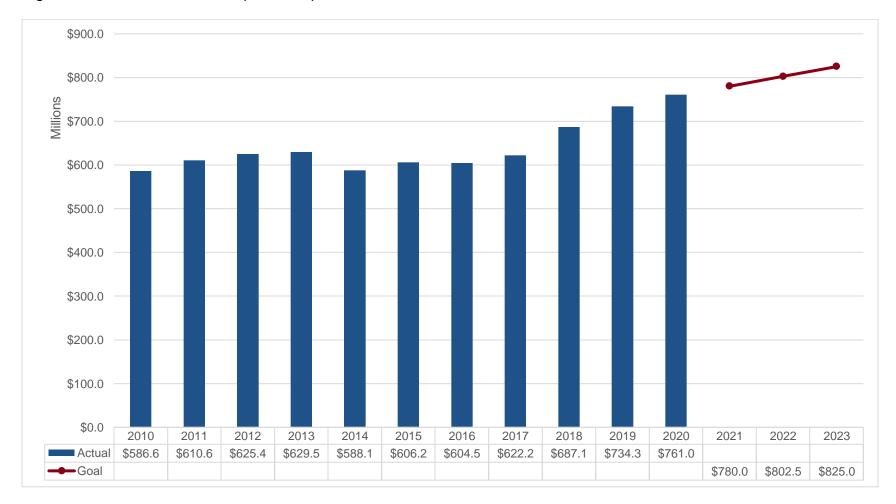


Figure 3: Undergraduate Enrollment, 2010-2023

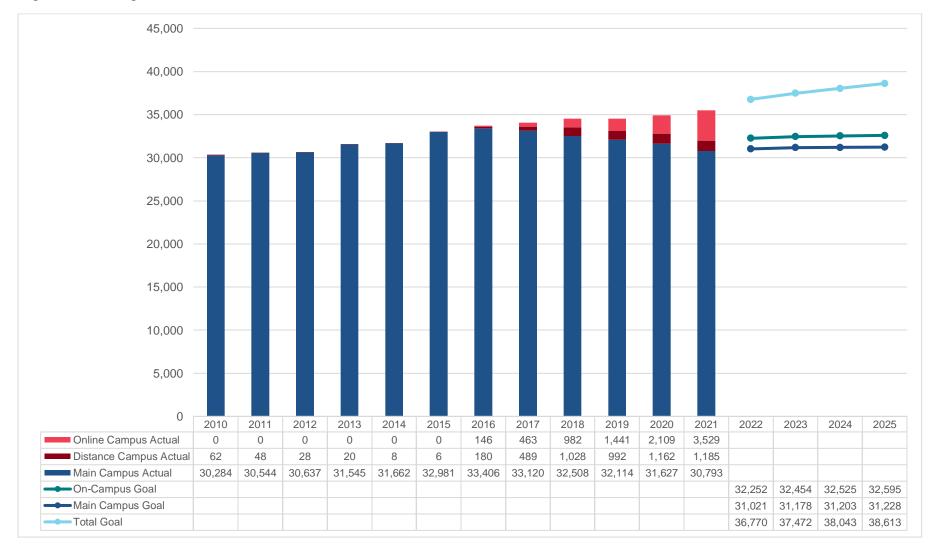


Figure 4: Graduate Enrollment, 2010-2023

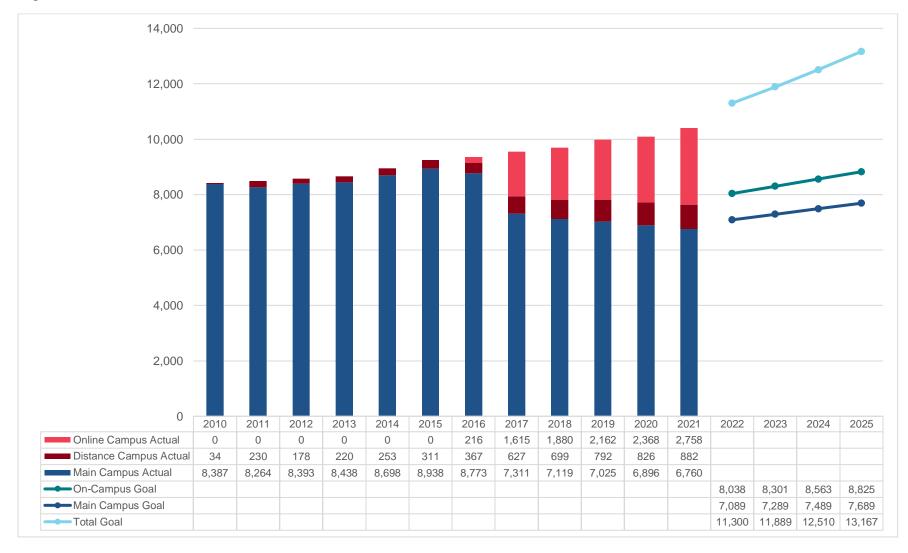


Table 2: Student Credit Hours (SCH) Over 10 Years, 2010-2020

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Faculty Head Count	2,763	2,887	2,972	3,067	3,117	3,058	3,091	3,133	3,184	3,408
Undergrad SCH	773,306	801,008	836,216	847,246	890,727	916,972	922,976	9,174,867	906,676	903,598
Grad SCH	129,695	131,431	127,236	125,626	123,048	121,802	131,449	128,372	128,607	129,562
Total SCH	903,001	932,439	963,452	972,871	1,013,774	1,038,774	1,054,426	1,045,859	1,035,284	1,033,160

Table 3: 2019 Student Credit Hours by Faculty Track

	Tenure Track	Annual Contract Career Track	Multi-Year Contract Career Track Faculty
Faculty Count	1,442	1,115	125
SCH Total Count	345,553	430,981	110,516
Median SCH by Faculty	163	191	589

Figure 5: Student to Tenure Track Faculty Ratios for Peer Institution Comparisons

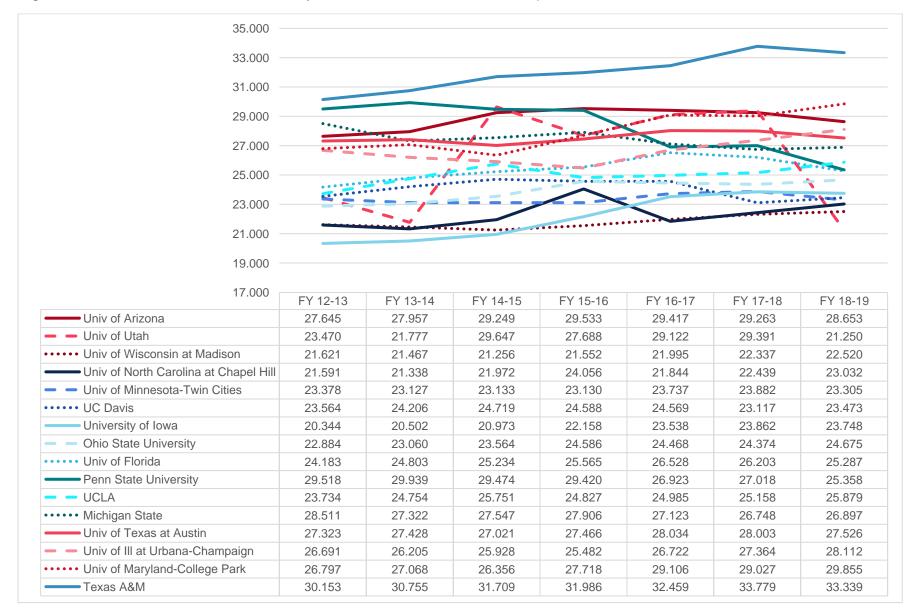


Figure 6: Student to All Faculty Ratios for Peer Institution Comparisons

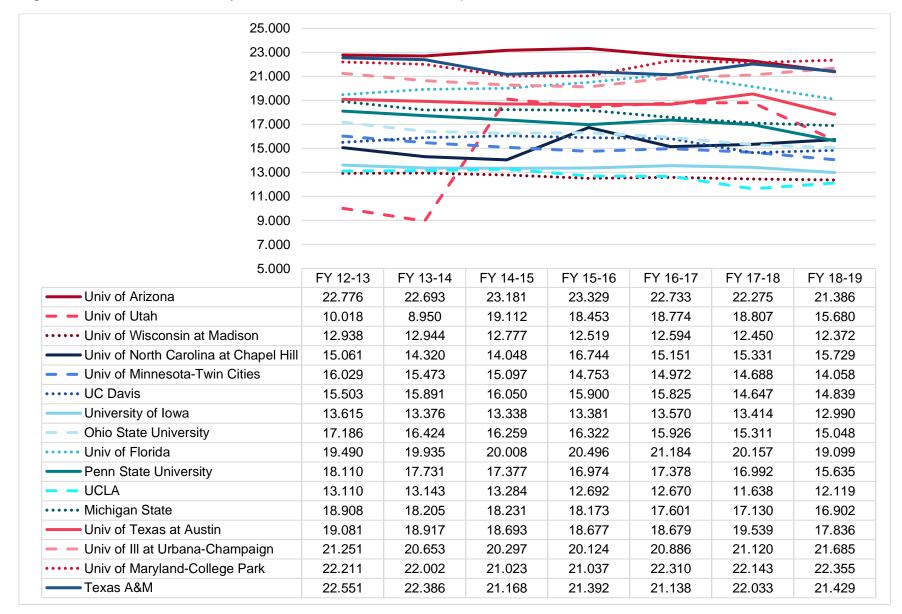


Figure 7: Key Take-Aways for UA Rankings Compared to 83 Benchmarking Institutions

Key Take-Aways Total Fall Enrollment Research & Development Expenditures First-Time Full-Time Retention Rate \$1,500M 70 60K 75% 19 \$1,000M 40K **17** 50% \$500M 20K 25% \$0M

Developed by the COVID-19 Financial Sustainability - Students & Tuition Revenue Workgroup

This report was prepared by the Student Workgroup of the Financial Sustainability Taskforce. During 2020-2021 the working group developed several resources on topics of student enrollment, tuition revenue, and faculty for the Financial Sustainability Taskforce which can be found at this website. For more information on the Financial Sustainability Taskforce visit this website.

Kasandra K. Urquidez Chair

Vice President, Enrollment Management Dean, Undergraduate Admissions

Ravneet Chadha

Executive Director, University Analytics/Institutional Research

Alain-Philippe Durand

Dean, College of Humanities

James S. Florian

Vice Provost, Institutional Planning and Analysis

Gregory L. Heilman

Professor, Electrical and Computer Engineering Associate Vice Provost, Academic Administration

Melanie Hingle

Professor, Nutritional Sciences Vice Chair of the Faculty

Marc L. Miller

Dean & Ralph W. Bilby Professor of Law

Garth J. Perry

Assistant Director, Budget & Planning

Lucinda L. Rankin

Associate Professor, Department of Physiology

Pamela H. Ray

Assistant Vice President, Financial Affairs

Andrea Romero

Professor, Family Studies & Human Development Vice Provost, Faculty Affairs

Shilpita Sen

President, Graduate & Professional Student Council

Tara N. Singleton

President, Associate Students of the University of Arizona

Kelly South

Senior Director, Communications & Marketing

Katie Van Renterghem

Director, Decision Planning and Support