Hire Ed: Job Market Dynamics for Tenure-Track Faculty Positions in Archaeology

Ben Marwick1,✉, Anne Marie Poole1, Ailin Zhang1, Setareh Shafizadeh1, and Jess Beck2

January 26, 2025

Abstract

Many archaeology graduate students pursue advanced degrees in the hope of undertaking an academic career. Job listing websites often serve as the first port-of-call for students seeking academic positions. We examined tenure-track job advertisements over the past decade to gain insights into the academic job market for archaeologists. Using data from the communit-edited Academic Jobs Wiki for Archaeology, we examine changes in the academic job market over time. We analyzed the text of 431 job ads posted from 2013–2023. Our analysis addresses the question of how archaeological topics, methods, and geographic regions specified in archaeological job ads shifted over time. We also investigate whether the labor burden for applicants has changed over time: do institutions request more information and documents from applicants at the initial stages of application, compared to a decade ago? We assess the influence of socio-political factors on the changing focus of research topics in the field. This research aims to assist current and future archaeology students, graduates, and advisors to better understand the dynamics of the academic job market and the requirements of employers.

1 Department of Anthropology, University of Washington, Seattle, USA  
2 School of Archaeology, University College Dublin, Ireland

✉ Correspondence: [Ben Marwick <bmarwick@uw.edu>](mailto:bmarwick@uw.edu)

Keywords: archaeology; hiring; academia; job ads

# Introduction

Attend any workshop, conference, or panel that includes early career researchers and the conversation will be steered inexorably towards the academic job market: who is hiring, who has attained a tenure-track position, and who is out of luck this season. This obsessive focus on career trajectories is warranted. As of 2019, 53.5% of colleges and universities had replaced tenure-eligible lines with contingent positions (American Association of University Professors 2022a); today, 71% of faculty in the US are non-tenure-track (Culver and Kezar 2022) . The erosion of permanent jobs in American higher education is linked to a complex intersection of political and economic factors (Beck under review 2025), including decreasing federal support for higher education, concomitant increases in student debt (Gusterson 2017), a pronounced shift in university investment from faculty to administration (Graeber 2018:162–163), and the growing privatization and market orientation of scientific research (Mirowski 2011).

These cultural and economic shifts are also well encapsulated by anecdata; any conversation with a junior scholar will reveal the impact of these larger professional transformations on personal and professional trajectories. The first author on this paper has applied to five academic positions over the course of his career, while the last author has applied to one hundred. A twenty-fold increase in the number of applications required to obtain a workable long-term academic position may seem preposterous, but these changing requirements for applicants are familiar to anyone who has obtained their PhDs since the Great Recession of 2008. This competitive landscape has deeper roots than the last economic crisis; writing more than three decades ago, Rabinow pinpointed “an awareness… that standards have changed during the last thirty years and the quantitative and qualitative demands for entry into the system are immeasurably higher now” (1992:66).

These higher demands include increased overall productivity, higher national and international mobility, more time spent in precarious short-term contracts, and the investment of a greater amount of time and energy in applying for long-term positions. In their survey of early career researchers in European archaeology, for example, Brami et al. found that 52% of respondents who had obtained their PhD at least two years before the survey were on fixed-term contracts, while only 9% were in permanent positions (2023:Figure 5). In their words, “the queue of eager post-docs hoping for a long-term appointment is getting longer, as is the average time spent in the ‘queue’” (2023:239). Ribeiro and Giamakis emphasize that this demographic comprises an academic precariat that is essential to the functioning of universities, but consists of a workforce perpetually “stranded between employment and unemployment” (Ribeiro and Giamakis 2023:10).

Junior scholars with faculty ambitions are thus stuck in a double-bind, forced to funnel their energy into seemingly endless applications for which they receive little to no feedback and which remain invisible on their CVs. As Dennis et al. underscore, early career researchers are “supplicants”: “There is no way for applicants to point out that the job ads are taking too much time out of the scholarly community’s collective time bank” (Dennis et al. 2022:1). Indeed, acknowledging the new reality that applying for academic positions is in and of itself a full-time job, a growing number of anthropology graduate programmes are offering professionalization courses that cover the ins and outs of everything from crafting strong cover letters and CVs, to performing well in long-list interviews and prepare teaching demonstrations. These courses can provide valuable training in the hidden curriculum of the academy, but that job applications are so complicated that they require training to navigate suggests more disciplinary attention should be paid to the “market” as a historically contingent set of cultural practices. As Rabinow maintains, “if we want ethical considerations to play a central role in the articulation of truth and power—and I think we do—then bringing such considerations into view is the necessary first step towards recognizing who we are today and setting out on the road to a better place” (1992:71).

We argue that to understand the dynamics of hiring in academic archaeology, we must start at the beginning, with the job ad itself. There is an abundance of recent work on who does and does not get hired into tenure-track positions in anthropology and archaeology, but less scholarship on how those hires unfold. Research on hiring dynamics has amply demonstrated that *where* you get your PhD has an enormous impact on if and where you get a tenure-track position (Kawa et al. 2019; Mackie and Rockwell 2023), but how about *what* you study? Are there topical, methodological, or regional specialties that are in consistent demand, or is there continual flux generated by intellectual fads, economic incentives, and political attention? Are job applications more demanding now than they were in the past, or is this a specious perception generated by the sheer volume of applications necessary to obtain a long-term academic position?

To answer these questions, this paper explores the demand-side of the academic job market for archaeologists in the United States. Our study had two aims: first, to determine if disciplinary trends could be discerned in the topical, geographic, and methodological foci of the positions advertised over a ten-year period, and second, to investigate how requirements for applicants have changed over time.

# Background

The academic job market is a source of uncertainty, for both job seekers and hiring committees. Job seekers must search for ads that are well-matched to the skill sets and professional experiences that they have taken years to cultivate. Hiring committees must sift through tens to hundreds of applicants in the hope of finding a candidate that meets all of their needs and helps to realize their visions for their program and for the discipline. Finding the right candidate for the position—or the right position for the candidate—is akin to finding a needle in a haystack.

Among many scholars, there is also a perception that the last three decades have seen the academic job market become increasingly competitive. Across the social sciences and humanities, there are fewer jobs available relative to the number of PhD graduates, and higher numbers of short-term positions relative to permanent positions(Bessner and Brenes 2021; Brami et al. 2023; Kawa et al. 2019; Kelsky 2015; Mackie and Rockwell 2023). This market saturation has arisen in tandem with increasingly complex application requirements. Many job ads now solicit specific documents in *addition* to the cover letter and CV, such as teaching, research, and diversity statements. These additional documents must be tailored for each application, making the process of applying for jobs a full-time job of its own.

In American anthropology, the number of doctoral anthropology graduates has increased by about 70% over the past 30 years, but the number of new faculty positions has not increased proportionally (Speakman et al. 2018). New faculty positions have dwindled, in part due to the removal of the of the Age Discrimination in Employment Act (ADEA) exemption in 1994 which prohibited mandatory retirement ages in higher education (Earle and DelPo Kulow 2014). When combined with the institution of tenure, the ADEA exemption allowed faculty to stay in their posts for as long as they liked. The median age for faculty in the U.S. now ranks among the highest for all professions (Kaskie 2016). In tandem with the gradual de-investment in American higher education since 1980s (Mirowski 2011) and the aftershocks of the 2008 recession, the ADEA exemption has cultivated an environment where new lines are few and far between. Among biological anthropologists, for example, Passalacqua (2018) found a ratio of 0.81 PhDs to job academic advertisements per year, concluding that academic positions in biological anthropology are barely at sustainable levels. This echoes findings from other fields. In biomedical sciences, there is one tenure-track position in the US for approximately every 6.3 PhD graduates (Ghaffarzadegan et al. 2015). In engineering, Larson et al., have calculated that providing jobs for even 50% of PhD graduates would require the field to expand at an “improbable” rate of 14% per year (2014:747). As they emphasize, “… the system in many places is saturated, far beyond capacity to absorb new PhDs in academia at the rates they are being produced” (Larson et al. 2014:749).

PhD graduates who do not go directly into a tenure-track faculty position after graduation often go into a series of short-term appointments as part-time or limited contract instructors, also known as adjunct or contingent faculty. The rising number of contingent faculty has long been a concern in US higher education (Trevithick 2010). Data from the American Association of University Professors’ 2021–22 faculty survey indicate that more than 60% of faculty positions in US universities were held by non-tenure-track full time or part time contingent faculty members (American Association of University Professors 2022b). Contingent faculty positions are precarious because they provide low or no health and retirement benefits, limited opportunities for professional development, and lower salaries relative to tenure-track positions. PhD graduates who have a sequence of short-term academic positions are often disadvantaged financially due to low compensation combined with expensive frequent relocation, socially due to isolation from family and community, and professionally due to being ineligible for many decision-making roles at the universities at which they work (Platzer and Allison 2018).

Success in tenure-track job applications in archaeology is strongly determined by where applicants get their PhDs. Data from the 2014–2015 AnthroGuide publication of the American Anthropological Association shows that just ten out of over 100 US graduate programs produced over 30% of the graduates hired into tenure-track faculty positions (Speakman et al. 2018). Top-ranking programs are placing fewer than one in three graduates in tenure-track jobs (Mackie and Rockwell 2023). Similarly, a network analysis of 1,918 faculty holding tenured or tenure-track positions at PhD-granting anthropology programs in the US in 2015 (including 506 archaeologists) found that the just fifteen graduate programs produced 53 percent of tenured and tenure-track positions (Kawa et al. 2019). This network analysis showed that programs with large endowments and faculty who hold prestigious awards and are widely cited by other scholars, produce the majority of tenured and tenure-track faculty.

Hiring bias predicated on the prestige of specific institutions and programs is not unique to anthropology. Targeted studies of sociology, communication, and operations research, and industrial systems engineering show similar dynamics (Barnett et al. 2010; Castillo et al. 2018; Feeley and Tutzauer 2021; Nevin 2019). Broader analyses comparing computer science, business, and history likewise comparable patterns among disparate disciplines across the humanities, social sciences, and STEM fields; “across disciplines, prestige hierarchies make the most accurate predictions of faculty placement” (Clauset et al.:4). The most recent comprehensive meta-analysis of faculty placement dynamics in the United States, which examined employment and doctoral education of all tenure-track faculty at PhD-granting universities, underscored the outsize impact of institutional prestige: 80% of faculty trained in the US came from just 20% of institutions (Wapman et al. 2022). Within anthropology, however, such studies draw attention to the paradox of a discipline committed to fighting social inequalities continuing to reproduce its own systematic inequalities through hiring practices that favor an elite minority of graduates with prestigious institutional affiliations.

One way that some hiring committees are tackling these prestige biases is by providing detailed instructions to applicants on how to prepare their application materials. In theory, detailed applications will allow the hiring committee to focus on evaluating the accomplishments of candidates across common categories rather than ranking based on prestige signals in a CV, such as a name of the applicant’s graduate program. This push for equity has resulted in job ads that are often highly prescriptive in the types of documents that applicants should submit. For example, in addition to a cover letter and CV, job ads in many fields now require applicants to submit short statements detailing their previous and future contributions to teaching, research, and diversity . In a comparison of job ads from 1999–2000 and 2019–2020 published in *Anthropology News*, Gershon and Rachok (2021) noticed an increase in the number of materials requested from applicants. For example, twice as many 2019–2020 job ads requested writing samples compared to 1999–2000, and nearly four times as many requested statements of teaching philosophy. In their review of the ‘worst job ads of 2021’ Dennis et al. (2022) reported job ads from Oberlin College and Grinnell College with particularly extreme requirements, which respectively requested nine and thirteen documents from applicants. This high burden on applicants disproportionately favors people with more time and financial resources to prepare the required materials.

A notable requirement that has emerged in recent years is a diversity statement, where the applicant describes their knowledge of, prior contributions to, and future goals for advancing diversity, equity, and inclusion. This requirement has been much-debated largely due to an experiment during 2016–2022 at several University of California campuses that used diversity statements as the first cut for selecting candidates for tenure-track faculty positions (Soucek 2022). Only candidates that scored highly on their diversity statements would have the rest of their application evaluated. This experiment generated intense and widespread public debate about the merits and risks of requiring and using diversity statements. These debates drew attention to the challenges of hiring faculty from underrepresented minorities, and resulted in a variety of approaches to evaluating diversity, even leading some universities to entirely omit requirements for diversity statements in job applications (Guiden 2024).

# Methods

Our primary data source is the Archaeology Academic Jobs Wiki. Originating in 2007, this is a set of freely accessible web pages that anyone can edit (anonymously or with a free user account) hosted by Fandom, a for-profit company. The Archaeology pages are part of the Academic Jobs Wiki, which coordinates similar collaboratively-edited resources for around 40 academic disciplines. The coordinators and contributors are nearly all anonymous or pseudonymous. Typically, contributors copy and paste all or some of the text of job ads into the wiki, from sources such as the *Chronicle of Higher Education*, *Higher Ed Jobs*, and university websites, collecting ads originally posted in numerous different locations. Other contributors then edit the web page to add comments below an ad to share relevant information based on their experience in applying for that position. These edits result in annotations such as a tally of how many people have applied, the dates of events such as requests for more materials, interviews, offer made, rejection notices, etc. Contributors also edit the page to ask and answer questions about the positions and the application process. These comments make the Academic Jobs Wiki a unique resource for timely and specific information for job-seekers about positions they are interested in, and one of the most important internet resources for the academic job market. Because of its reputation for aggregating ads from diverse sources and rapidly-updated information that is not available elsewhere, the Academic Jobs Wiki has become an authoritative data source for studies of hiring trends in academia (Musial and Holmes 2018; e.g. Passalacqua 2018) and a widely recommended resource for applicants (e.g. Lightfoot et al. 2021).

For each tenure-track job advertised on the Archaeology Academic Jobs Wiki during 2013-2023, we read the text and recorded the name of the hiring institution, the title of the position, and exact words and phrases from the ad about the topical, geographic, and methodological foci of the position into a Google form. The topical focus is what we understood as the intellectual core of the position—examples of topical foci included environmental archaeology, public archaeology, and North American archaeology. The geographic focus is the region of the world about which the ideal candidate has scholarly expertise, for example, Southwest US, Mediterranean, or Asia and India. The methods focus is the data-generating sub-field of archaeology mentioned in the ad. Examples of methods used in this study include archaeobotany, lithic analysis, and zooarchaeology. We also recorded the type and number of documents requested in each ad (e.g. cover letter, CV, statements on research, teaching, diversity , syllabi, course descriptions, writing samples, transcripts) and how many names/letters of recommenders were requested in the ad.

After completing primary data collection, we studied the topical, geographic, and methods text of each ad. Following the approach of Ryan and Bernard (2003), we collaboratively and manually reduced the variation in the raw data into 10-15 categories appearing in at least 20 (for topics and geography) or 10 (for methods) job ads to simplify analysis and visualization. This means that some topics, such as gender (mentioned in 6 ads) do not appear in our results because of their rarity in the job ads. Full details of the category reduction, showing the mapping between exact phrases found in the job ads and the categories we used for our analysis, can be found in our Supplementary Materials. Our final topic categories were: American archaeology, Ancient Europe and Mediterranean, Archaeological science, Archaeological theory, Bioarchaeology, Complex societies, Digital archaeology, Environmental archaeology, Evolutionary anthropology, Indigenous and historical archaeology, North Mesoamerican archaeology, Pleistocene archaeology, and Public archaeology. Our geographic categories were: Africa, Americas, Asia & India, Canada & Arctic, Europe, Mediterranean, Meso- & South America, Near East, Oceania, Midwest US, Northeastern US, Southeast US, Southwest US, and Western US. Our methods categories were: Archaeobotany, Archaeometry, Bioarchaeology, Ceramic analysis, Computational and Digital archaeology, Geoarchaeology, Landscape analysis, Lithic analysis, Material culture analysis, and Zooarchaeology.

Individual ads could be recorded to have multiple or none of these topical, geographic, and methods foci, and some of the foci overlap. Some topics include geographic regions because this is how they are typically understood by archaeologists. For example, Mesoamerican archaeology is understood to refer to a specific time period *and* a specific geographic region. Similarly, we recorded digital archaeology as both a method (when a job ad also had a clearly distinct topical focus, such as historic archaeology) and a topic (when there were no other topics mentioned in the job ad). While this polythetic approach results in categorical overlaps that can make the data challenging to interpret (Kuckartz 2014), in our view this reflects the complex realities of how search committees express their needs when searching for new faculty. Acknowledgement of overlaps also produces new insights into hiring dynamics through revealing intersections between different foci.

The entire R code (R Core Team 2024) and data files used for all the analyses and visualizations contained in this paper are openly available at https://doi.org/xxx/xx to enable re-use of materials and improve reproducibility and transparency (Marwick 2017). All of the figures, tables, and statistical test results presented here can be independently reproduced with the code and data in this repository. The code is released under the MIT license, the data as CC-0, and the figures as CC-BY, to enable maximum re-use.

# Results

We collected data from 547 ads for tenure-track jobs in archaeology posted during 2013-2023. We focus our analysis here on the 431 ads for positions at US universities. [Figure 1](#fig-show-basic-plots) shows the count of ads for each year. Assistant Professor jobs are consistently the most common title and rank of positions advertised, while open rank or full professor are the least frequent. The ratio of tenure-track to non-tenure-track positions is generally well above one; in other words, this data set is dominated by tenure-track positions. Only academic year 2013-2014 had more non-tenure-track positions than tenure-track positions, which was followed by an upward trend peaking at 2018-2019 and then declining again into the present.

|  |
| --- |
| Figure 1: A: total number of job ads posted to the Academic Jobs Wiki for Archaeology in each year, with coloured sections showing the proportion of jobs by title and rank. B: Ratio of tenure-track to non-tenure-track positions over time. The red line indicates a 1:1 ratio of tenure-track to non-tenure-track positions, bars taller than that line indicate more tenure-track than non-tenure-track positions in that year |

## Characteristics of the hiring institutions

|  |
| --- |
| Figure 2: A: Frequency of hiring institution by Carnegie classification. B: Inset shows map of the United States showing the count of tenure-track job ads posted by all insititutions in each state during 2013 – 2023 |

Panel A of [Figure 2](#Xb6ce60108169ab29fd4ed84e6becc1ec8f0f199) shows the frequencies of institutions according to their Carnegie Classification, a framework for classifying US colleges and universities according to the types of degrees awarded, levels of activity such as research, and topical foci (Shulman 2001). Doctoral universities with high and very high research activity are by far the most active institutions hiring archaeology faculty. Associate’s colleges, also known as community colleges, rarely post job ads for archaeology faculty.

Panel B of [Figure 2](#Xb6ce60108169ab29fd4ed84e6becc1ec8f0f199) shows the geographic distribution of the hiring institutions. California posted almost twice as many job ads as the next most active states. After California, the states that posted the most ads during 2013-2023 include New York, Texas, Pennsylvania, and Florida. These top five states correspond to the top five most populous US states, suggesting that rates of hiring are approximately proportional to population density. The top five states for job ads are also the five states with highest number of degrees awarded in Anthropology (National Center for Education Statistics 2025). Similarly, the lowest counts of job ads were observed in states with the lowest populations: North Dakota, South Dakota, Alaska, and Nebraska. No institutions in Montana posted a job ad during this period. The implication here is that job-seekers who are able to relocate to populous areas will have more employment options.

## Geographic trends over time in job ads

|  |
| --- |
| Figure 3: A: Frequency of locations mentioned in the text of the job ads. B: Popularity of locations in job ads over time for locations that appear in 20 or more ads. Individual data points are shown, overlain by a locally weighted regression line for each location to indicate temporal trends. |

We recorded all geographic regions mentioned in the text where the successful applicant should have expertise and be research active. Our analysis focuses on those locations mentioned in 20 or more ads. Overall, American locations dominate. Panel A of [Figure 3](#fig-show-geo-trends) shows that a single region of the US, the Southwest, occurs in more job ads than every other part of the world except for the Mediterranean. The Southwest includes Arizona and New Mexico, with portions of California, Colorado, Nevada, Oklahoma, Texas, and Utah. It is archaeologically significant as the home of the Ancestral Pueblo, Hohokam, and Mogollon peoples, who practiced irrigation agriculture and lived in relatively large settlements compared to other regions of the US. The area was later occupied by the Navajo, Ute, Southern Paiute, Hopi and Zuni, groups who had similarly high population densities (Griffin-Pierce 2000). The Mediterranean is prominent because it is the location that is often mentioned in job ads focused on classical archaeology (i.e. archaeology of Bronze Age and Iron Age Italy and Greece).

Demand for jobs focusing on the Americas has been generally high over the past decade, with a peak in 2019-2020 and a subsequent decrease. Demand for jobs focusing on Africa was very low until 2019-2020, peaking in 2020-2021. The proportion of ads with a geographic focus on the Mediterranean has varied substantially, peaking in 2016 and experiencing a nadir in 2019, showing an inverse pattern to the Americas. Asia and India, the Near East, and Europe rarely occur as a geographical focus in job ads at US institutions. Asia and India, Africa, and the Americas appear correlated with each other, while the Near East and Mediterranean are inversely correlated in an opposite trend.

## Method trends over time

|  |
| --- |
| Figure 4: A: Frequency of methods mentioned in the text of the job ads. B: Popularity of methods in job ads over time for methods that appear in 10 or more ads. Individual data points are shown, overlain by a locally weighted regression line for each location to indicate temporal trends. |

Landscape archaeology, encompassing GIS and remote sensing, has remained prominent compared to other methods [Figure 4](#fig-show-metho-trends). The popularity of this suite of methods may reflect its importance as a skill in demand by employers in the Cultural Research Management (CRM) sector. Morgan (2023) found that almost one-third of 599 jobs ads posted by CRM employers sought candidates with experience in GIS methods. Methods focused on a specific element of the archaeological record, such as Lithic analysis, Zooarchaeology and Ceramics are among the least frequently mentioned in job ads. Instead, more popular methods are those that are relevant to multiple elements of the archaeological record (e.g. Archaeobotany encompasses macroscopic and microscopic plant remains; Bioarchaeology often includes skeletal analysis, isotopes, proteins, etc.).

Landscape archaeology, although dominant, has fluctuated over the years and has been on a downtrend since 2018-2019. Computational and digital archaeology is the second most represented method, showing an overall increasing trend, particularly since 2020-2021. Archaeobotany shows a strong cyclical trend, rising, falling, and then rising again over our study period. Archaeometry and Geoarchaeology have maintained a relatively low but steady presence in job ads, peaking in 2017-2018 and 2018-2019 and declining thereafter. Lithic analysis and Zooarchaeology are also mentioned relatively infrequently in job ads and show an inverse correlation with each other after 2018-2019.

## Topic trends over time

|  |
| --- |
| Figure 5: A: Frequency of topics mentioned in the text of the job ads. B: Popularity of topics in job ads over time for topics that appear in 20 or more ads. Individual data points are shown, overlain by a locally weighted regression line for each location to indicate temporal trends. |

The most frequently mentioned topic in the job ads is Environmental archaeology [Figure 5](#fig-show-topi-trends). This category encompasses such phrases as human-environmental dynamics, interaction between humans and their environments, environmental change, climate change, historical ecology, ecological knowledge, human ecology, and ecological systems. Public archaeology is the second most frequent topic overall; this category included phrases such as cultural resource management, cultural heritage, heritage studies, museum studies, human rights, community engaged, historic preservation, social justice, community-based, repatriation, and community-engaged archaeology. The least common topics in our sample are Pleistocene archaeology (e.g. human origins, hunter-gatherer archaeology) and digital archaeology.

The years 2019-2020 and 2020-2021 show striking changes in the popularity of topics in job ads. Indigenous and historical archaeology (which includes archaeology of the African diaspora and enslaved people) became the most popular topic at this time, rising from being one of the least popular topics from 2012-2017. Conversely, archaeological science, which was popular during 2012-2017, was rarely mentioned in job ads during 2019-2021. Ancient Europe and the Mediterranean, an infrequently mentioned topic for the entire study period, virtually disappeared from job ads during 2019-2021. Mentions of complex societies in ads decrease at a steady rate, while mentions of public archaeology consistently increase over the study period. The topic of Environmental Archaeology remains high over time.

|  |
| --- |
| Figure 6: Heatmap of topic co-occurrance in job ads. |

In our sample job ads were more topically rich than geographically or methodologically rich. That is, ads were more likely to mention multiple topics than they were to mention multiple methods or geographic locations. A Kruskal-Wallis test indicated significantly higher richness in topics compared to richness of geographic locations or methods in job ads (χ2 (df = 1, N = 836) = 160.42, p = 9*x*10-37). [Figure 6](#fig-show-cooc) shows topic co-occurrences in our sample. Indigenous and historical archaeology often occurs in job ads with Public archaeology and North American archaeology. Complex societies and environmental archaeology were frequently found in the same ads. Bioarchaeology, Archaeological science, and Evolutionary archaeology are another cluster of topics that frequently co-occur. Other topics are relatively isolated. For example, Pleistocene archaeology and digital archaeology rarely occur with other topics.

## Instructions to applicants over time

|  |
| --- |
| Figure 7: Changing requirements in job ads over time. Each point represents an individual job ad. The points have been jittered to avoid overlap. The black line is a locally weighted regression line to identify temporal trends. The grey region is the 95% confidence interval for the regression line. |

Over our ten year study period there have been substantial changes in the instructions to applicants in terms of the type and number of documents that are requested by the search committees [Figure 7](#fig-requirements-over-time). Requests for cover letter and CV decline in more recent years, perhaps reflecting their status as a generic and expected component to submit without needing to be specifically requested. The requirement for a diversity statement is rare until 2019-2020, peaks around 2020-2021, then decreases towards the present. Requests for names of recommenders (either zero or three names, rarely only two names) reaches a maximum during 2019-2020, then also decline for the remainder of the study period. The requirement for a research statement and teaching statement increases after 2015-2016, and becomes more frequent in job ads in more recent years. Requests for course descriptions, syllabus samples, teaching evaluations, transcripts and writing samples are consistently low over time (not shown here).

|  |
| --- |
| Figure 8: Variation in application requirements by academic position. Each point represents an individual job ad. The points have been jittered to avoid overlap. The red point is the mean value for each group. |

Instructions to applicants vary by the rank of the position advertised [Figure 8](#fig-requirements-by-position). Assistant professor positions tend to have the most complex instructions with many different types of documents required. Conversely, full professor positions have minimal requirements. The documents that are most frequently requested across all three ranks are cover letter and CV.

# Discussion

Our study of a decade of tenure-track job ads in archaeology in the US reveals diverse dynamics in the demand for specialisations in topics, methods and geographic focus, and in the instructions to applicants. While these dynamics are familiar to scholars actively seeking faculty positions, we believe this is the first time they have been quantified at such a large scale within archaeology. Trends in job ads reflect broader shifts in intellectual and practical priorities concerning archaeology, undergraduate education, and the process of hiring professors. The demand for archaeology faculty, indicated by the total number of tenure-track jobs, maybe affected by a variety of factors. Overall, we found more tenure-track jobs advertised each year than non-tenure-track, with the exception of 2013-2014. This is at odds with previous work that has shown that contingent positions make up more than half of faculty positions (American Association of University Professors 2022b), and that these numbers are increasing— between 2004 and 2019, for example, there was a 36% increase in the replacement of tenure-track positions by contingent positions (American Association of University Professors 2022a). This discrepancy in our data set may be due to the more limited circulation of advertising for short-term positions relative to advertising for tenure-track jobs. Many of these short-term positions are not advertised nationally, but only through local email lists and are filled by people close to the hiring department, such as recently graduated students. One possible explanation for our results is that non-tenure-track jobs are less frequently added to the Academic Jobs Wiki. The downward trend in tenure-track positions during 2013-2019 may be related to declining undergraduate enrollment in anthropology since 2013 (Cramb et al. 2022). The big dip during 2020-2021 is explained by the hiring freezes at many institutions resulting from the COVID-19 pandemic, which caused extreme disruption and uncertainty as universities focused on adapting to online instruction and assessment in an effort to minimize the spread of the virus (Woolston 2020). A survey of early career researchers in archaeology captures the impact of this dip, with three-quarters of respondents experiencing negative impacts on their careers due to the pandemic (Brami et al. 2023)

The 2019-2021 period was also a major inflection point in the popularity of specific topics and regions in job ads. Calls for positions incorporating Indigenous and historical archaeology and archaeology of the Americas became far more frequent at this time, while Archaeological science, Complex societies, the Mediterranean and Near East and showed declines in popularity. Similarly, the number of job ads with a geographic focus on the Americas and Africa peaks during 2019–2021. These shifts in the topical and geographic foci of job ads were likely influenced by broader cultural movements such as Black Lives Matter, protests about racial injustice, and efforts to amplify Indigenous voices (Dunivin et al. 2022; Flewellen et al. 2021; Franklin et al. 2020; Laluk et al. 2022). COVID-19 negatively impacted Black, Indigenous American, and Hispanic communities with significantly higher infection and morbidity rates, drawing attention to racial and socio-economic inequality in the US (Mackey et al. 2021; Tai et al. 2021). The Black Lives Matter movement, dating back to 2013, intersected profoundly with the pandemic and the murder of George Floyd in Minneapolis by a police officer in May 2020, three months after the World Health Organization declared COVID-19 to be a pandemic. Mass protests objecting to Floyd’s murder generated widespread concern about racial inequities and stimulated a broad interest in addressing systemic racial injustice.

Our data suggest that archaeology faculty at US universities participated in this movement by adjusting their hiring plans to prioritize recruiting archaeologists working on topics relevant to Black and Indigenous communities. Many universities may have hoped to hire Black and Indigenous archaeologists as part of their effort to tackle systemic racism. Due to the 1964 Civil Rights Act which prohibits hiring based solely on race or ethnicity, however,it is illegal in the US for universities use race or ethnicity as a primary factor in hiring. As a result, universities appear to have tailored the content of their job ads to focus on topics where they expect Black and Indigenous researchers to be most numerous, in an effort to ensure that these researchers would be well-represented in the pool of applicants.

This striking change in topics and geographic foci of 2019-2021 occurred against a backdrop of several longer-term trends. Over the course of the study period, we document a gradual decline in topics such as the archaeology of complex societies and archaeological science, the geographic foci of Mesoamerica and South America, and methods relating to landscape archaeology. These trends are harder to explain as we cannot link their origins to a historical event like the COVID-19 pandemic. We might speculate that a growing preference for archaeological approaches that privilege agency-driven, relational perspectives, in combination with human subjectivity and cultural framing, is one enduring legacy of debates in the 1980s and 90s about processualism versus post-processualism (Fogelin 2019; Hodder 1999; Johnson 2019). This theoretical trend might explain why archaeological science is showing a decline, as demand for methods for analyzing artefact materiality, ontology, and power displace physical laboratory methods for technological, functional, and compositional analyses. Other factors relevant to this decline may include increasing difficulty of obtaining research funding to support archaeological science research, such as laboratory facilities and instrumentation. A decline in interest in the archaeology of complex societies may reflect several themes that intersect with broader social changes, such as growing interest in Indigenous and non-state actors in the past and an increased concern with climate change, environmental sustainability, and resilience, shifting attention away from the study of monumental architecture, elite societies, political hierarchies, and state systems.

Our data on the requirements for applicants support prior findings that the complexity of applications—and concomitantly, the labor required to apply for tenure-track jobs—has gradually increased over time. This trend is especially pronounced for Assistant Professor positions, which make more demands on applicants than Associate and Full Professor positions. Consistent with results from other studies (Gershon and Rachok 2021), our project documented a growing demand for research and teaching statements. Demand for diversity statements shows a unique trajectory, peaking in 2020-2021 and declining into the present. This may relate to the intersecting concerns about race, identity and class inequalities emerging during the COVID-19 pandemic, which seem to have reached a peak in 2020-2021 and then declined over time, resulting in jettisoning requests for diversity statements as the most urgent period of the pandemic moves into the past. Another factor here may be the debates surrounding the experiment with diversity statements in hiring at some UC campuses during 2016-2022. Universities that previously required a diversity statement dropped that requirement after 2022 (Guiden 2024). In our data we observed a reversal of the diversity statement requirement at 4 universities. Those schools posted job ads prior 2022 that did require a diversity statement and also posted an ad in 2022 that did not require one.

One bright spot for applicants is the decline in recent years for requests for names of recommenders in the initial application. This may be a response to recent criticisms of the burden on the applicant of preparing numerous complex job applications (e.g. Dennis et al. 2022). In recognition of this burden, not only on applicants but also on colleagues writing letters of recommendation over and over to support applicants, many hiring committees now follow the recommendations of Dennis et al. (2022) in only requesting names and letters of recommendation at later stages of the hiring process, if at all. Showing sensitivity to this burden, in 2020 the American Anthropological Association issued guidance to academic departments that letters of recommendation should not be requested in the initial application, but should only be required from short-listed candidates(American Anthropological Association 2020; Youngling and Gershon 2020).

A key limitation of our research is that it does not include an analysis of the academic profiles of those who were eventually hired based on this sample of job ads. Our results reveal collective aspirations for the future of the field, but only from those writing the job ads, typically faculty who are securely employed as tenured professors serving on hiring committees at US colleges and universities. Our results do not show how these aspirations worked out in the topical and geographic foci of the people who were actually hired for these positions. Future work should consider interviewing faculty hired during our study period to match up scholars witgh the ads to which they applied. If the successful applicants can be identified, then we could analyze the fit between the details of the job ad and the applicant’s research. Such an analysis would allow us to assess how effective job ads are for driving change in the discipline by setting the topics of courses that will be taught in undergraduate and graduate curricula, and research that will be supported by universities. We also recognize the possibility that the Academic Jobs Wiki might not capture all available positions or might over-represent certain types of institutions. Future work should evaluate this by comparing entries on the Wiki to other sources of information about the academic job market, such as the American Anthropological Association’s AnthroGuide, or data collected directly from universities.

# Conclusion

Our results show that job ads offer a nuanced record of disciplinary history, documenting shifting trends in topics, methods, and geographic foci, with higher chronological resolution than many other sources, such as undergraduate textbooks (Lyman 2010). The short periods of time spanning the rise and fall of some of the foci we observed have implications for prospective graduate students. A topic that is growing in popularity as a student begins their PhD may have peaked and be in decline before they graduate. Methods seem to have a much lower frequency of change in popularity relative to topical and geographic foci. One possible implication of this finding is that a graduate student who has invested in developing technical expertise in a method during their studies, in addition to a topic and region, might be less vulnerable to the vagaries of the job market than a student without a distinct area of technical expertise.

Jobs ads also demonstrate how archaeologists draw on current events and politics to prioritize topics, regions, and methods in their hiring plans. This result is consistent with prior findings, such Wilk (1985)’s analysis of publications that identified trends in the explanations of the Maya collapse during the 1960s-1970s that corresponded with major contemporary American political and social issues. This continual responsiveness to current events demonstrates that many archaeologists accept that our narratives of the past are entangled in the social and political milieu in which we work. Furthermore, it shows an active effort by archaeologists to take control of interpreting the past.

# Acknowledgements

Thanks to the anonymous contributors to the Academic Jobs Wiki, without whose efforts to collect and organise hundreds of job ads, this paper would not exist. To those of who contributed to the wiki but don’t have a tenure-track job, we hope this paper shows your efforts were not wasted, but were a contribution to more accurate expectation-setting for future generations of archaeologists.

# Data Availability Statement

The data that support the findings of this study are openly available in Zenodo at http://doi.org/xxx/xxx.

# References cited

American Anthropological Association 2020 Job board policies. <https://employers.americananthro.org/static-page/10285/job-board-policies/>, accessed January 26, 2025.

American Association of University Professors 2022b The annual report on the economic status of the profession, 2021–22. American Association of University Professors. <https://www.aaup.org/report/annual-report-economic-status-profession-2021-22>, accessed January 26, 2025.

2022a The 2022 AAUP survey of tenure practices. <https://www.aaup.org/report/2022-aaup-survey-tenure-practices>, accessed January 26, 2025.

Barnett, George A., James A. Danowski, Thomas Hugh Feeley, and Jordan Stalker 2010 Measuring Quality in Communication Doctoral Education Using Network Analysis of Faculty-Hiring Patterns. *Journal of Communication* 60(2):388–411. DOI:[10.1111/j.1460-2466.2010.01487.x](https://doi.org/10.1111/j.1460-2466.2010.01487.x).

Beck, Jess under review 2025 Stubborn architecture: The jobs crisis in academic anthropology. In. SAR Press, Santa Fe.

Bessner, Daniel, and Michael Brenes 2021 The academic jobs crisis: A forum. *Passport: The Society for Historians of American Foreign Relations Review* 52(1):3053.

Brami, Maxime, Stephanie Emra, Antoine Muller, Bianca Preda-Bălănică, Benjamin Irvine, Bogdana Milić, Aldo Malagó, Katie Meheux, and Manuel Fernández-Götz 2023 A Precarious Future: Reflections from a Survey of Early Career Researchers in Archaeology. *European Journal of Archaeology* 26(2):226–250. DOI:[10.1017/eaa.2022.41](https://doi.org/10.1017/eaa.2022.41).

Castillo, Enrique del, Adam Meyers, and Peng Chen 2018 A Social Network Analysis of the Operations Research/Industrial Engineering Faculty Hiring Network. *preprint on arXiv.org*. DOI:[10.48550/arXiv.1803.00125](https://doi.org/10.48550/arXiv.1803.00125).

Clauset, Aaron, Samuel Arbesman, and Daniel B. Larremore Systematic inequality and hierarchy in faculty hiring networks. *Science Advances* 1(1):e1400005. DOI:[10.1126/sciadv.1400005](https://doi.org/10.1126/sciadv.1400005).

Cramb, Justin, Brandon T. Ritchison, Carla S. Hadden, Qian Zhang, Edgar Alarcón-Tinajero, Xianyan Chen, K. C. Jones, Travis Jones, Katharine Napora, Matthew Veres, and Victor D. Thompson 2022 The Changing Profile of Tenure-Track Faculty in Archaeology. *Advances in Archaeological Practice* 10(4):371–381. DOI:[10.1017/aap.2022.8](https://doi.org/10.1017/aap.2022.8), accessed October 16, 2024.

Culver, KC, and Adrianna Kezar 2022 [The impacts of 2020 on advancement of non-tenure-track and adjunct faculty](https://doi.org/10.17226/26405). In *Promotion, tenure, and advancement through the lens of 2020: Proceedings of a workshop—in brief*, edited by Maria Lund Dahlberg, pp. 16–19. National Academies of Sciences, Engineering,; Medicine.

Dennis, Dannah, Dada Docot, Danielle Gendron, and Ilana Gershon 2022 The Worst of Anthro Job Ads for 2021. *American Anthropologist* 124(4):900–905. DOI:[10.1111/aman.13781](https://doi.org/10.1111/aman.13781), accessed October 22, 2024.

Dunivin, Zackary Okun, Harry Yaojun Yan, Jelani Ince, and Fabio Rojas 2022 Black lives matter protests shift public discourse. *Proceedings of the National Academy of Sciences* 119(10):e2117320119. DOI:[10.1073/pnas.2117320119](https://doi.org/10.1073/pnas.2117320119).

Earle, Beverley, and Marianne DelPo Kulow 2014 The "Deeply Toxic" Damage Caused by the Abolition of Mandatory Retirement and Its Collision with Tenure in Higher Education: A Proposal for Statutory Repair. *Southern California Interdisciplinary Law Journal*:369–418.

Feeley, Thomas Hugh, and Frank Tutzauer 2021 The faculty hiring network for PhD-granting communication programs. *Scientometrics* 126(5):3983–4003. DOI:[10.1007/s11192-021-03917-y](https://doi.org/10.1007/s11192-021-03917-y).

Flewellen, Ayana Omilade, Justin P. Dunnavant, Alicia Odewale, Alexandra Jones, Tsione Wolde-Michael, Zoë Crossland, and Maria Franklin 2021 “The Future of Archaeology Is Antiracist”: Archaeology in the Time of Black Lives Matter. *American Antiquity* 86(2):224–243. DOI:[10.1017/aaq.2021.18](https://doi.org/10.1017/aaq.2021.18).

Fogelin, Lars 2019 An unauthorized companion to american archaeological theory. Self-published. <https://arizona.academia.edu/LarsFogelin>, accessed January 26, 2025.

Franklin, Maria, Justin P. Dunnavant, Ayana Omilade Flewellen, and Alicia Odewale 2020 The Future is Now: Archaeology and the Eradication of Anti-Blackness. *International Journal of Historical Archaeology* 24(4):753–766. DOI:[10.1007/s10761-020-00577-1](https://doi.org/10.1007/s10761-020-00577-1).

Gershon, Ilana, and Dafna Rachok 2021 Hello to Tristes Tropes. Anthropology News. <https://www.anthropology-news.org/articles/hello-to-tristes-tropes/>, accessed August 2, 2022.

Ghaffarzadegan, Navid, Joshua Hawley, Richard Larson, and Yi Xue 2015 A note on PhD population growth in biomedical sciences. *Systems Research and Behavioral Science* 32(3):402–405. DOI:[10.1002/sres.2324](https://doi.org/10.1002/sres.2324).

Graeber, David 2018 *Bullshit jobs*. Simon & Schuster, New York.

Griffin-Pierce, Trudy 2000 *Native peoples of the southwest*. UNM Press.

Guiden, Mary 2024 Are Diversity Statements a Thing of the Past? Harvard is the Latest to Drop This Requirement for Job Applicants. <https://www.higheredjobs.com/Articles/articleDisplay.cfm?ID=3948>, accessed November 1, 2024.

Gusterson, Hugh 2017 Homework: Toward a critical ethnography of the university: AES presidential address, 2017. *American Ethnologist* 44(3):435–450. DOI:[10.1111/amet.12520](https://doi.org/10.1111/amet.12520).

Hodder, Ian 1999 *The archaeological process: An introduction*. Blackwell, Oxford.

Johnson, Matthew 2019 *Archaeological theory: An introduction*. John Wiley & Sons.

Kaskie, Brian 2016 The Academy Is Aging in Place: Assessing Alternatives for Modifying Institutions of Higher Education. *The Gerontologist*:gnw001. DOI:[10.1093/geront/gnw001](https://doi.org/10.1093/geront/gnw001).

Kawa, Nicholas C., José A. Clavijo Michelangeli, Jessica L. Clark, Daniel Ginsberg, and Christopher McCarty 2019 The Social Network of US Academic Anthropology and Its Inequalities. *American Anthropologist* 121(1):14–29. DOI:[10.1111/aman.13158](https://doi.org/10.1111/aman.13158), accessed October 31, 2024.

Kelsky, Karen 2015 *The professor is in: The essential guide to turning your ph.d. Into a job*. Three Rivers Press, New York.

Kuckartz, Udo 2014 *Qualitative text analysis: A guide to methods, practice and using software*. Sage.

Laluk, Nicholas C., Lindsay M. Montgomery, Rebecca Tsosie, Christine McCleave, Rose Miron, Stephanie Russo Carroll, Joseph Aguilar, Ashleigh Big Wolf Thompson, Peter Nelson, Jun Sunseri, Isabel Trujillo, GeorgeAnn M. DeAntoni, Greg Castro, and Tsim D. Schneider 2022 Archaeology and Social Justice in Native America. *American Antiquity* 87(4):659–682. DOI:[10.1017/aaq.2022.59](https://doi.org/10.1017/aaq.2022.59).

Larson, Richard C., Navid Ghaffarzadegan, and Yi Xue 2014 Too Many PhD Graduates or Too Few Academic Job Openings: The Basic Reproductive Number R0 in Academia. *Systems Research and Behavioral Science* 31(6):745–750. DOI:[10.1002/sres.2210](https://doi.org/10.1002/sres.2210).

Lightfoot, Elizabeth, Cynthia Franklin, and Raiza Beltran 2021 Preparing for the academic job market: A guide for social work doctoral students and their mentors. *Journal of Social Work Education* 57(1):153–164.

Lyman, R Lee 2010 American archaeology textbooks as reflections of the history of the discipline. *North American Archaeologist* 31(1):1–25.

Mackey, Katherine, Chelsea K. Ayers, Karli K. Kondo, Somnath Saha, Shailesh M. Advani, Sarah Young, Hunter Spencer, Max Rusek, Johanna Anderson, Stephanie Veazie, Mia Smith, and Devan Kansagara 2021 Racial and ethnic disparities in COVID-19related infections, hospitalizations, and deaths. *Annals of Internal Medicine* 174(3):362–373. DOI:[10.7326/M20-6306](https://doi.org/10.7326/M20-6306).

Mackie, Madeline E., and Heather Rockwell 2023 Beyond market share: Accounting for doctoral program size in recent rates of anthropology faculty job placement. *PLOS ONE* 18(5):e0285330. DOI:[10.1371/journal.pone.0285330](https://doi.org/10.1371/journal.pone.0285330).

Marwick, Ben 2017 Computational reproducibility in archaeological research: Basic principles and a case study of their implementation. *Journal of Archaeological Method and Theory* 24(2):424–450. DOI:[10.1007/s10816-015-9272-9](https://doi.org/10.1007/s10816-015-9272-9).

Mirowski, Philip 2011 *Science-mart : Privatizing american science*. Harvard University Press, Cambridge, Mass.

Morgan, Rachel 2023 Ready or Not: An Archaeological Knowledge, Skills, and Abilities Needs Assessment. *Advances in Archaeological Practice* 11(4):371–387. DOI:[10.1017/aap.2023.21](https://doi.org/10.1017/aap.2023.21).

Musial, Jennifer, and Christina Holmes 2018 Five-year study on hiring trends in gender, women’s, and feminist studies. *Feminist Studies* 44(2):253–272.

National Center for Education Statistics 2025 Integrated postsecondary education data system (IPEDS). U.S. Department of Education. <https://nces.ed.gov/ipeds/>, accessed January 25, 2025.

Nevin, Andrew D. 2019 Academic Hiring Networks and Institutional Prestige: A Case Study of Canadian Sociology. *Canadian Review of Sociology/Revue canadienne de sociologie* 56(3):389–420. DOI:[10.1111/cars.12252](https://doi.org/10.1111/cars.12252).

Passalacqua, Nicholas V. 2018 Are careers in biological anthropology sustainable? *American Journal of Physical Anthropology* 166(3):772–776. DOI:[10.1002/ajpa.23457](https://doi.org/10.1002/ajpa.23457).

Platzer, David, and Anne Allison 2018 Academic Precarity in American Anthropology. Society for Cultural Anthropology. <https://culanth.org/fieldsights/academic-precarity-in-american-anthropology>, accessed October 31, 2024.

R Core Team 2024 [*R: A language and environment for statistical computing*](https://www.R-project.org/). R Foundation for Statistical Computing, Vienna, Austria.

Rabinow, Paul 1992 For hire: Resolutely late modern. In, pp. 5971. School of American Research Press, Santa Fe.

Ribeiro, Artur, and Christos Giamakis 2023 On Class and Elitism in Archaeology. *Open Archaeology* 9(1):20220309. DOI:[10.1515/opar-2022-0309](https://doi.org/10.1515/opar-2022-0309).

Ryan, Gery W, and H Russell Bernard 2003 Techniques to identify themes. *Field methods* 15(1):85–109.

Shulman, Lee S 2001 *The Carnegie classification of institutions of higher education*. The Carnegie Foundation for the Advancement of Teaching, California.

Soucek, Brian 2022 [Diversity statements](https://lawreview.law.ucdavis.edu/archives/55/4/diversity-statements.html). *University of California Davis Law Review* 55:1989–2050.

Speakman, Robert J, Carla S Hadden, Matthew H Colvin, Justin Cramb, KC Jones, Travis W Jones, Corbin L Kling, Isabelle Lulewicz, Katharine G Napora, Katherine L Reinberger, and others 2018 Choosing a path to the ancient world in a modern market: The reality of faculty jobs in archaeology. *American Antiquity* 83(1):1–12.

Tai, Don Bambino Geno, Aditya Shah, Chyke A Doubeni, Irene G Sia, and Mark L Wieland 2021 The disproportionate impact of COVID-19 on racial and ethnic minorities in the united states. *Clinical Infectious Diseases* 72(4):703–706. DOI:[10.1093/cid/ciaa815](https://doi.org/10.1093/cid/ciaa815).

Trevithick, Alan 2010 Anthropology and the new faculty majority: Adjunct and contingent labor. *Anthropology News* 51(9):4–4. DOI:[10.1111/j.1556-3502.2010.51904.x](https://doi.org/10.1111/j.1556-3502.2010.51904.x).

Wapman, K. Hunter, Sam Zhang, Aaron Clauset, and Daniel B. Larremore 2022 Quantifying hierarchy and dynamics in US faculty hiring and retention. *Nature* 610(7930):120–127. DOI:[10.1038/s41586-022-05222-x](https://doi.org/10.1038/s41586-022-05222-x), accessed November 1, 2024.

Wilk, Richard R 1985 The ancient Maya and the political present. *Journal of Anthropological Research* 41(3):307–326.

Woolston, Chris 2020 Junior researchers hit by coronavirus-triggered hiring freezes. *Nature* 582(7812):449–450. DOI:[10.1038/d41586-020-01656-3](https://doi.org/10.1038/d41586-020-01656-3).

Youngling, Elizabeth, and Ilana Gershon 2020 Let’s make the academic job market more humane. *Anthropology News*. DOI:[10.1111/AN.1341](https://doi.org/10.1111/AN.1341).

### Colophon

This report was generated on 2025-01-26 17:34:42.433732 using the following computational environment and dependencies:

─ Session info ───────────────────────────────────────────────────────────────  
 setting value  
 version R version 4.4.1 (2024-06-14)  
 os macOS Sonoma 14.6.1  
 system x86\_64, darwin20  
 ui X11  
 language (EN)  
 collate en\_US.UTF-8  
 ctype en\_US.UTF-8  
 tz America/Los\_Angeles  
 date 2025-01-26  
 pandoc 3.2 @ /Applications/RStudio.app/Contents/Resources/app/quarto/bin/tools/x86\_64/ (via rmarkdown)  
  
─ Packages ───────────────────────────────────────────────────────────────────  
 package \* version date (UTC) lib source  
 archive 1.1.10 2024-11-08 [1] CRAN (R 4.4.1)  
 beeswarm 0.4.0 2021-06-01 [1] CRAN (R 4.4.0)  
 bit 4.5.0 2024-09-20 [1] CRAN (R 4.4.1)  
 bit64 4.5.2 2024-09-22 [1] CRAN (R 4.4.1)  
 cachem 1.1.0 2024-05-16 [1] CRAN (R 4.4.0)  
 cellranger 1.1.0 2016-07-27 [1] CRAN (R 4.4.0)  
 cli 3.6.3 2024-06-21 [1] CRAN (R 4.4.0)  
 colorspace 2.1-1 2024-07-26 [1] CRAN (R 4.4.0)  
 cowplot \* 1.1.3 2024-01-22 [1] CRAN (R 4.4.0)  
 crayon 1.5.3 2024-06-20 [1] CRAN (R 4.4.0)  
 data.table 1.16.2 2024-10-10 [1] CRAN (R 4.4.1)  
 devtools 2.4.5 2022-10-11 [1] CRAN (R 4.4.0)  
 digest 0.6.37 2024-08-19 [1] CRAN (R 4.4.1)  
 dplyr \* 1.1.4 2023-11-17 [1] CRAN (R 4.4.0)  
 ellipsis 0.3.2 2021-04-29 [1] CRAN (R 4.4.0)  
 evaluate 1.0.1 2024-10-10 [1] CRAN (R 4.4.1)  
 fansi 1.0.6 2023-12-08 [1] CRAN (R 4.4.0)  
 farver 2.1.2 2024-05-13 [1] CRAN (R 4.4.0)  
 fastmap 1.2.0 2024-05-15 [1] CRAN (R 4.4.0)  
 fiftystater \* 1.0.1 2024-09-17 [1] Github (wmurphyrd/fiftystater@28e7fa5)  
 forcats \* 1.0.0 2023-01-29 [1] CRAN (R 4.4.0)  
 fs 1.6.5 2024-10-30 [1] CRAN (R 4.4.1)  
 generics 0.1.3 2022-07-05 [1] CRAN (R 4.4.0)  
 ggbeeswarm \* 0.7.2 2023-04-29 [1] CRAN (R 4.4.0)  
 ggplot2 \* 3.5.1 2024-04-23 [1] CRAN (R 4.4.0)  
 ggrepel \* 0.9.6 2024-09-07 [1] CRAN (R 4.4.1)  
 glue 1.8.0 2024-09-30 [1] CRAN (R 4.4.1)  
 gridExtra 2.3 2017-09-09 [1] CRAN (R 4.4.0)  
 gtable 0.3.6 2024-10-25 [1] CRAN (R 4.4.1)  
 here \* 1.0.1 2020-12-13 [1] CRAN (R 4.4.0)  
 hms 1.1.3 2023-03-21 [1] CRAN (R 4.4.0)  
 htmltools 0.5.8.1 2024-04-04 [1] CRAN (R 4.4.0)  
 htmlwidgets 1.6.4 2023-12-06 [1] CRAN (R 4.4.0)  
 httpuv 1.6.15 2024-03-26 [1] CRAN (R 4.4.0)  
 janitor 2.2.0 2023-02-02 [1] CRAN (R 4.4.0)  
 jsonlite 1.8.9 2024-09-20 [1] CRAN (R 4.4.1)  
 knitr 1.49 2024-11-08 [1] CRAN (R 4.4.1)  
 labeling 0.4.3 2023-08-29 [1] CRAN (R 4.4.0)  
 later 1.3.2 2023-12-06 [1] CRAN (R 4.4.0)  
 lattice 0.22-6 2024-03-20 [1] CRAN (R 4.4.1)  
 lifecycle 1.0.4 2023-11-07 [1] CRAN (R 4.4.0)  
 lubridate \* 1.9.3 2023-09-27 [1] CRAN (R 4.4.0)  
 magrittr 2.0.3 2022-03-30 [1] CRAN (R 4.4.0)  
 mapproj 1.2.11 2023-01-12 [1] CRAN (R 4.4.0)  
 maps 3.4.2.1 2024-11-10 [1] CRAN (R 4.4.1)  
 Matrix 1.7-1 2024-10-18 [1] CRAN (R 4.4.1)  
 memoise 2.0.1 2021-11-26 [1] CRAN (R 4.4.0)  
 mgcv 1.9-1 2023-12-21 [1] CRAN (R 4.4.1)  
 mime 0.12 2021-09-28 [1] CRAN (R 4.4.0)  
 miniUI 0.1.1.1 2018-05-18 [1] CRAN (R 4.4.0)  
 munsell 0.5.1 2024-04-01 [1] CRAN (R 4.4.0)  
 nlme 3.1-166 2024-08-14 [1] CRAN (R 4.4.1)  
 pillar 1.9.0 2023-03-22 [1] CRAN (R 4.4.0)  
 pkgbuild 1.4.5 2024-10-28 [1] CRAN (R 4.4.1)  
 pkgconfig 2.0.3 2019-09-22 [1] CRAN (R 4.4.0)  
 pkgload 1.4.0 2024-06-28 [1] CRAN (R 4.4.0)  
 png 0.1-8 2022-11-29 [1] CRAN (R 4.4.0)  
 profvis 0.4.0 2024-09-20 [1] CRAN (R 4.4.1)  
 promises 1.3.0 2024-04-05 [1] CRAN (R 4.4.0)  
 purrr \* 1.0.2 2023-08-10 [1] CRAN (R 4.4.0)  
 R6 2.5.1 2021-08-19 [1] CRAN (R 4.4.0)  
 ragg 1.3.3 2024-09-11 [1] CRAN (R 4.4.1)  
 RColorBrewer 1.1-3 2022-04-03 [1] CRAN (R 4.4.0)  
 Rcpp 1.0.13-1 2024-11-02 [1] CRAN (R 4.4.1)  
 readr \* 2.1.5 2024-01-10 [1] CRAN (R 4.4.0)  
 readxl \* 1.4.3 2023-07-06 [1] CRAN (R 4.4.0)  
 remotes 2.5.0 2024-03-17 [1] CRAN (R 4.4.0)  
 rlang 1.1.4 2024-06-04 [1] CRAN (R 4.4.0)  
 rlist \* 0.4.6.2 2021-09-03 [1] CRAN (R 4.4.0)  
 rmarkdown 2.29 2024-11-04 [1] CRAN (R 4.4.1)  
 rprojroot 2.0.4 2023-11-05 [1] CRAN (R 4.4.0)  
 rstudioapi 0.17.1 2024-10-22 [1] CRAN (R 4.4.1)  
 scales 1.3.0 2023-11-28 [1] CRAN (R 4.4.0)  
 sessioninfo 1.2.2 2021-12-06 [1] CRAN (R 4.4.0)  
 shiny 1.9.1 2024-08-01 [1] CRAN (R 4.4.0)  
 snakecase 0.11.1 2023-08-27 [1] CRAN (R 4.4.0)  
 stringi \* 1.8.4 2024-05-06 [1] CRAN (R 4.4.0)  
 stringr \* 1.5.1 2023-11-14 [1] CRAN (R 4.4.0)  
 systemfonts 1.1.0 2024-05-15 [1] CRAN (R 4.4.0)  
 textshaping 0.4.0 2024-05-24 [1] CRAN (R 4.4.0)  
 tibble \* 3.2.1 2023-03-20 [1] CRAN (R 4.4.0)  
 tidyr \* 1.3.1 2024-01-24 [1] CRAN (R 4.4.0)  
 tidyselect 1.2.1 2024-03-11 [1] CRAN (R 4.4.0)  
 tidyverse \* 2.0.0 2023-02-22 [1] CRAN (R 4.4.0)  
 timechange 0.3.0 2024-01-18 [1] CRAN (R 4.4.0)  
 tzdb 0.4.0 2023-05-12 [1] CRAN (R 4.4.0)  
 urlchecker 1.0.1 2021-11-30 [1] CRAN (R 4.4.0)  
 usethis 3.0.0 2024-07-29 [1] CRAN (R 4.4.0)  
 utf8 1.2.4 2023-10-22 [1] CRAN (R 4.4.0)  
 vctrs 0.6.5 2023-12-01 [1] CRAN (R 4.4.0)  
 vipor 0.4.7 2023-12-18 [1] CRAN (R 4.4.0)  
 viridis \* 0.6.5 2024-01-29 [1] CRAN (R 4.4.0)  
 viridisLite \* 0.4.2 2023-05-02 [1] CRAN (R 4.4.0)  
 vroom 1.6.5 2023-12-05 [1] CRAN (R 4.4.0)  
 withr 3.0.2 2024-10-28 [1] CRAN (R 4.4.1)  
 xfun 0.49 2024-10-31 [1] CRAN (R 4.4.1)  
 xtable 1.8-4 2019-04-21 [1] CRAN (R 4.4.0)  
 yaml 2.3.10 2024-07-26 [1] CRAN (R 4.4.0)  
  
 [1] /Library/Frameworks/R.framework/Versions/4.4-x86\_64/Resources/library  
  
──────────────────────────────────────────────────────────────────────────────

The current Git commit details are:

Local: main /Users/bmarwick/Downloads/archyjobads  
Remote: main @ origin (https://github.com/benmarwick/archyjobads)  
Head: [cf672c4] 2025-01-25: review some comments