Preliminary Report of Analyses of Main Campus Faculty Base Salary Compensation Undertaken in AY2015/2016

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Table of Contents

Executive Summary

UNM has worked for several years to ensure that it is meeting its commitment to the principle of comparable pay for comparable work for all of its employees, including women and under-represented groups. Any shortfall in predicted salaries on the basis of gender, race or ethnicity, no matter how small, is unacceptable and UNM will take all appropriate steps to remedy them. To help alleviate concerns about potential inequities or uncompetitive salaries at UNM, the Office of Academic Affairs conducted two studies of base salary compensation rates of Main campus faculty members with continuing appointments:

➢ Study #1 – Internal Analysis of UNM's FY2014/15 Compensation Rates to Ascertain Whether Faculty Receive Comparable Pay for Comparable Work (performed by the Bureau of Business and Economic Research)

➢ Study #2 – External Comparison of UNM's FY2015/16 Compensation Rates with those of 76 other Public Research Universities to Ascertain Whether Faculty Salaries Are Competitive—an important consideration in UNM's ability to recruit and retain faculty (performed by the Office of Faculty Affairs and Services)

This report details the analytical methodology and results of the two studies; describes the method by which $600,000 was allocated to the various Schools and Colleges for compensation adjustments; and explains the terms under which the amount of individual faculty base salary adjustments were derived. Additional faculty demographic data and analysis, and background information on factors that affect compensation on Main campus are provided in addenda.

Study #1 showed:

➢ In general, measures of gender equity have improved at UNM over the last ten years – women comprise greater portions of UNM's full-time faculty, tenured faculty, and full professors than they did in 2004-2005.

➢ Although average salaries of female and minority faculty are lower than those of their counterparts, the differences are largely due to factors other than gender, race or ethnicity, as controlled for in the study. Such factors include rank and field of study. Specifically:

  o Male faculty members on Main campus are more likely than female faculty to have ranks of Full or Distinguished Professor (39% male vs. 22% female), reflecting a legacy of the 1980s and earlier. This trend has begun to reverse.

  o White non-Hispanic faculty on Main campus are more likely to have positions in higher paying academic departments, such as engineering or business, whereas minority faculty are more likely to have positions in lower paying departments such as humanities.

➢ Salary differences between females vs. males, and minorities vs. non-minorities are relatively small but vary substantially by rank.

  o Holding constant factors such as rank and field of study, average salaries of female faculty members of any race are 0.7% (or, by separate analysis, $123) higher than white, non-Hispanic men.

  o By the same measures, average salaries of minority male faculty members are 0.8% ($920) lower those of their white, non-Hispanic counterparts.

➢ When continuing faculty *including* lecturers were analyzed at the level of UNM as a whole, women had salary levels that were 1.7% less than the salaries for white males of similar experience and disciplines.

➢ When the professorial ranks *excluding* lecturers were analyzed at the level of UNM as a whole, women had salary levels that were 1.09% less than the salaries for white males of similar experience and disciplines.

➢ Women and minorities' salaries at UNM tend to become less competitive over time when compared to men and non-minorities as they move through the faculty ranks.

Study #2 showed:

➢ 30.2% of UNM tenured and tenure/track faculty are below the 25th percentile of the average of salaries at 76 other public research universities

➢ 55.3% of UNM tenured and tenure/track faculty are below the 50th percentile (median) of the average of salaries at 76 other public research universities; 44.7% of UNM tenured and tenure/track faculty are above 50th percentile (median)

➢ It would take $1,947,571 to bring the FY16 salaries of the Main campus professoriate up to the 25th percentile

➢ It would take $5,000,138 to bring the FY16 salaries of the Main campus professoriate up to the 50th percentile (median)

The process has created a transparent framework by which compensation rates can be informed by external market data and internal comparisons to ensure faculty receive competitive salaries and comparable pay for comparable work. This newly created process was used for the first time in making the allocations described in this report.

Provost Chaouki Abdallah allocated $600,000 of new recurring revenue to the Main Campus Colleges and Schools to put toward base salary compensation increases effective AY2016/2017 with the goal of closing these gaps. While this is the amount of revenue that was available, it is clearly insufficient to fully close all of the identified gaps.

A preliminary analysis of the impact of the allocations indicates that proportionately more of the $600,000 revenue went to women and minority faculty members, as was intended.

Percent of Main Campus Faculty Receiving Compensation Adjustments by Rank			
Rank	Total Adjusted of all Faculty	Total Women Adjusted of all Women	Total Minorities Adjusted of all Minorities
Professor (Including Distinguished)	32%	47%	45%
Associate Professor	33%	37%	32%
Assistant Professor	24%	25%	26%
Lecturer (All Titles)	10%	12%	27%

During the fall of 2016, the Office of Faculty Affairs will fully analyze the impact of the $600,000 allocation to determine its effectiveness in closing the identified gaps. Following the impact assessment, this report will be updated and released as a final project report.

These adjustments occurred in the context of a larger, ongoing effort to redesign the way in which faculty compensation is overseen and managed at UNM. This effort created a new data- and policy-driven framework by which compensation rates can be tracked, reported and analyzed for improvement to ensure UNM's strategic compensation goals are fully realized. For example, Main campus will continue to use CUPA data in the future to inform salary offers at hire, and merit and retention adjustments in the future.

Next Steps:

The compensation analyses significantly advanced our understanding of the effect of gender, race and ethnicity, rank and field of study on compensation rates, but it is important to acknowledge that these analyses are only a portion of the ongoing work that is needed and planned.

It will be essential to understand the root causes of why the salaries of women and minorities are more likely than white males to become less competitive over time. Is it because women and minorities seek promotion in rank at different rates than do non-minority men, as some have hypothesized? Does the fact that probationary faculty at UNM have equivalent compensation rates regardless of gender or ethnicity mean that this problem will self-correct over time, or will it take policy adjustments to close the gap completely?

Lecturer salaries require further review given the variability introduced when these salaries were included in the initial gender comparisons. The Office of Academic Affairs recently established minimum wages for Lecturers, http://ofas.unm.edu/faculty/compensation/minimum-wages-for-faculty/index.html, which will help guide the further review of lecturer salaries.

An analysis of Branch campus faculty salaries for internal equity and market competitiveness is also in progress, with a targeted completion date of January 2017.

A review of current Main campus faculty compensation policies will occur in AY2016/17, guided by the faculty advisory committee and informed by the data obtained during the AY2015/16 compensation studies. The ultimate goals of this effort will be to ensure that UNM's faculty compensation policies support equity and encourage and reward faculty productivity and innovation.

A key component of the ongoing work will include creation of analytical 'compensation dashboards' to more easily provide access to the newly established compensation data infrastructure for Chairs and Deans in order to better inform salary offers at hire, and merit, equity and retention adjustments in the future. The dashboard development is in progress with a targeted completion date of January 2017.

The Office of Academic Affairs will also continue to work with the senior leadership of UNM to seek additional recurring revenue to put toward identified gaps in faculty compensation.

This work will continue to be led by the Senior Vice Provost and will occur during AY2016/17.

Definition of Acronyms and Terms

AAUP	American Association of University Professors (AAUP)
Average	The mean or central number in a data set calculated by dividing the sum of all values by their number; see Addendum Five which describes the limitations of using an average when seeking insight into the compensation rates of a given population.
AY	Academic Year (AY), i.e., Fall and Spring Semesters; August through subsequent May
Banner	Software used by UNM to maintain faculty personnel and compensation data. Banner is the most used technology platform in higher education and provides enterprise-wide planning, tracking and recording capacity for student, faculty and staff data in the areas of recruiting, admissions, academic administration, student finances, financial aid, human resources and finance.
Base salary	The faculty salary conferred by the primary employment contract; on Main campus the contract base salary does not include any temporary compensation that may come from teaching overloads, special administrative components (SAC), or temporary rewards, incentives, endowments, etc.
BBER	UNM's Bureau of Business and Economic Research (BBER)
R1 and R2	Subset of doctoral-degree institutions as classified within the Carnegie Classification of Institutions of Higher Education; based on an institution's research activity; R1 = highest activity; R2 = higher activity (http://carnegieclassifications.iu.edu/definitions.php)
CIP	U.S. Dept. of Education, National Center for Education Statistics (https://nces.ed.gov/ipeds/cipcode/browse.aspx?y=55), Classification of Instructional Programs (CIP); used as a control for discipline in Study #2
Compression/Compaction	Refers to the downward pressure on compensation rates of long-serving faculty whose salary does not keep pace with market rates; often referred to as a 'Loyalty Tax'
Continuing Appointments	'Regular' faculty appointments as defined by UNM Faculty Handbook consisting of tenured, probationary (tenure-track), and lecturer appointments with an expectation of contract renewal
Credentials	Highest degree attained by each faculty member in the study population. UNM Faculty Handbook and UNM's accreditor, Higher Learning Commission (HLC), set minimum standards for degree attainment to qualify for continuing faculty appointments and promotion in rank. Tenured and probationary (tenure-track)

	appointments require a terminal degree; a Lecturer appointment requires a Master's degree at minimum.
CUPA	College and University Professional Association for Human Resources (CUPA)
Dashboards	Web tools that provide an overview of reports and metrics such as faculty compensation rates; at UNM, Academic Affairs maintains dashboards at http://informatics.unm.edu/
Department	Administrative organization of faculty and degree-granting pro-grams, typically organized by field or subfields, i.e., an academic unit; Study #1 used Department as a control for discipline
Discipline	Area of study, field or subfield; faculty compensation rates are subject to market differentials based on the discipline
Equity	When used in the context of faculty compensation, refers to the concept of 'comparable pay for comparable work' as required by two federal statutes -- the Equal Pay Act of 1963 (EPA) and Title VII of the Civil Rights Act of 1964 (Title VII) –prohibiting discrimination in the context of compensation based on gender or a protected class
FTE	Full-time equivalent (FTE). When used as a unit of measurement in the context of employment, represents hours worked by one employee on a full-time basis; concept is also used to convert the effort of several part-time employees into the equivalent effort of full-time employees.
FY	Fiscal Year (FY), i.e., a 12-month period; July through the subsequent June
Inversion by Rank	Refers to faculty at lower ranks having higher compensation rates than faculty at higher ranks. Typically occurs as a consequence of market forces, e.g., a faculty member hired in 2008 most likely started at a lower base salary than one in the same field who started in 2015; if adequate compensations increases are not forthcoming for the earlier-hired faculty member, their salary may end up lower than that of more junior faculty members
OFAS	Office of Faculty Affairs and Services (OFAS); serves as employment area for Main and Branch campus faculty. Reviews and processes all academic unit-initiated faculty personnel actions for entry into data systems of record including recruiting, hiring, contracting, compensation, leaves, etc.; serves as faculty data steward of record.
Regression Analysis	A statistical process for estimating the relationships among variables by estimating the conditional expectation of the dependent variable (in the case of Study #1, base salaries) given various independent variables (in the case of Study #1, the variable controlled for as described below); i.e., the average value of the dependent variable when the independent variables are fixed

Retention Increase	Compensation increase made in an effort to retain a high-performing faculty member who has received, or is highly likely to receive, a competitor's offer of a higher salary
Main Campus	Albuquerque campus and its academic units (does not include the Health Sciences Center academic units)
Median	The point at which half of the salaries measured are below that amount, and half of the salaries measures are above that amount; i.e., the 50th percentile
Merit Increase	Compensation increase to base salary made on the basis of meritorious performance
n	Number in a study sample or population
Rank	Progressive promotion levels available to faculty holding professorial appointments. In order by rank: Assistant Professor, Associate Professor, Professor, and Distinguished Professor
Terminal Degree	Highest degree possible to attain in a given field or discipline, e.g., Ph.D., M.F.A., J.D., etc.
Variable	A description of the factors contributing to compensation rates that were studied in Study #1
WMM	White Male Model (WMM); widely acknowledged as a useful method for assessing whether salaries potentially reflect the existence of bias in compensation practices or policies.
25th Percentile	The point at which 25% of the salaries measured are below that amount, and 75% of the salaries measures are above that amount
50th Percentile	The point at which half of the salaries measured are below that amount, and half of the salaries measures are above that amount; the median
9-Month Contract	A contract term defined by an academic year; default contract period for regular, continuing faculty members on Main campus
12-Month Contract	A contract term defined by a fiscal year; default contract period for faculty executives, e.g., provosts, deans, directors, etc.

Project Description and Background

UNM's Main campus faculty compensation policies seek to accomplish several goals. These goals generally fit within three broad categories:

➢ Incentivize, recognize and reward faculty work aligned with UNM's mission and strategic goals

➢ Recruit, hire and retain the most accomplished faculty possible to ensure UNM remains academically strong and competitive

➢ Ensure that faculty receive comparable pay for comparable work

Can we have confidence that our compensation policies are achieving these goals? To answer that question, and to establish a baseline for continual measurement of the effectiveness of ongoing efforts to improve the compensation picture for UNM's faculty, the Senior Vice Provost conducted two studies of the base salaries of Main campus faculty with continuing appointments, i.e., tenured, tenure-track and lecturer appointments, during AY2015-2016:

➢ Study #1 – Internal Analysis of UNM's FY2014/15 Compensation Rates to Ascertain Whether Faculty Receive Comparable Pay for Comparable Work (performed by Bureau of Business and Economic Research) (n=963)

➢ Study #2 – External Comparison of UNM's FY2015/16 Compensation Rates with the average of those at 76 other Public Research Universities to Ascertain Whether UNM Faculty Salaries Are Competitive—an important consideration in UNM's ability to recruit and retain faculty (performed by Office of Faculty Affairs and Services) (n=976)

Project Timeline and Communication Strategies

➢ $600,000 of compensation increases are awarded to base salaries of 254 faculty; preliminary impact analysis begins (August 31, 2016)

➢ Final allocation guidelines are determined, and deans receive datasets to guide base salary adjustment recommendations (May 16, 2016)

➢ SVP Parker reports preliminary results to UNM Board of Regents Committee on Academic/ Student Affairs and Research (May 5, 2016)

➢ SVP Parker reports preliminary results of both studies to Deans Council March 10, 2016

➢ Bureau of Business and Economic Reporting (BBER) shares preliminary results (Study #1) with faculty advisory committee March 24, 2016

➢ SVP Parker discusses BBER study with Faculty Senate (January 26, 2016)

➢ Provost Abdallah issues Statement Regarding Gender Pay Equity at UNM (July 1, 2015) (http://provost.unm.edu/documents/letters-memos/unm-pay-equity_provost-response-

final.pdf)

- SVP Parker presents project description to faculty and administration leadership (June 11, 2015) (http://provost.unm.edu/documents/ay2015-2016-faculty-comp-study.pdf)

- SVP Parker Presentation about the project to the UNM Board of Regents Committee on Academic/Student Affairs and Research (June 4, 2015) (http://provost.unm.edu/regents-committee/ebook/june-asar-ebook.pdf, Tab D)

- UNM Newsroom Report, Academic Affairs to study faculty compensation (June 4, 2015) (http://news.unm.edu/news/academic-affairs-to-study-faculty-compensation)

Data Sources and Validation Efforts

The Office of Faculty Affairs and Services (OFAS) extracted from Banner and validated faculty compensation data sets for the two projects. The data date for the internal equity analysis was December 31, 2014 (mid-point in AY2014/15); the data date for the external market competitiveness study was December 31, 2015 (mid-point in AY2015/16). Data validation efforts focused on two important factors where the Banner data were known to be questionable: years in rank, and the year of terminal-degree attainment. Faculty themselves were emailed during 2015 and asked to confirm their degree year; chairs and deans were also asked to validate data on degree year and years in rank for their faculty.

The first analysis of the data by BBER occurred in the Fall of 2015; preliminary results revealed some additional concerns about the integrity of the Banner data for faculty hired prior to 1990, calling into question the integrity of the results of initial regression analysis. Error sampling for faculty hired after 1990 showed greater reliability in these data points.

During the month of December, 2015, the OFAS staff physically pulled and analyzed the hard copy CVs of every faculty member hired prior to 1990 to ensure accuracy in these two important factors. A revised AY2014/15 data set was produced in January, 2016 and was used for all subsequent BBER models and published results. The AY2015/16 data set used or the external study was produced in the Spring of 2016 and therefore automatically contained the validated data.

Study #1 – Internal Equity Study (BBER Regression Analysis)

During AY2015-2016 the Office of Academic Affairs contracted the Bureau of Business & Economic Research to assess whether pay gaps exist between: (1) male faculty and female faculty; and (2) white non-Hispanic faculty and minority faculty members.   Guided by a nationally recognized expert in faculty gender equity issues, Dr. Abigail Stewart of the University of Michigan,[1] and a faculty advisory committee consisting of Dr. Melissa Binder (Economics), Dr. Janie Chermak (Economics), Dr. Phillip Gonzales (Sociology), Dr. Robert Berrens (Economics), Sonia Maria Gipson Rankin, J.D. (University College), and Dr. Abhaya Datye (Chemical and Biological Engineering), BBER undertook regression analyses of base salary compensation rates for Main campus faculty with tenured, probationary and lecturer appointments. The intent of the study was to assess the extent to which salary differences are the result of differences in education, experience, rank, department or discipline, race, ethnicity, and/or gender.

Population Studied

The BBER study population included 822 tenured, tenure-track faculty, and 141 lecturers (n=963). A small number of current faculty executives, e.g., Provosts, Vice Presidents, Deans, were excluded from the study population by design. Analyses of subsets of the population, e.g., tenured, tenure-track faculty only, were also performed (n=822).

Methodology

BBER conducted econometric analyses of compensation rates for continuing faculty at UNM Main campus focusing on gender and race/ethnicity as key variables in the regression analyses. The methodologies used were guided by: Haignere, Lois. *Paychecks: A Guide to Conducting Salary-Equity Studies for Higher Education Faculty* (AAUP 2002).   For a complete description of the methodology, please see Addendum Three.

The data analyzed consisted of the AY2014/15 base salaries as of December 31, 2014. Analysis of base salaries is considered to be the industry standard for such assessments. The data date selected, December 31st, corresponds with the data date for UNM's annual Affirmative Action Plan compensation data date, and the data date of the College and University Professional Association for Human Resources (CUPA) annual salary survey.

Variables

Faculty compensation may be influenced by numerous factors, including nondiscriminatory factors such fields of study, rank, full or part-time status and years since terminal degree was awarded, as well as potentially discriminatory factors such as gender, race and ethnicity. This research project

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[1] Abigail Stewart, Ph.D., University of Michigan Sandra Schwartz Tangri Distinguished University Professor, and Director of the University of Michigan ADVANCE Program.

used multivariate regression analysis to isolate the impact of individual factors on faculty compensation, allowing for a statistical analysis of discriminatory factors while holding constant other, nondiscriminatory factors. The regression study used the base contract salary (controlled for 9 mo., 1.0 FTE) as the dependent variable, and controlled for the independent variables listed below.

> Gender
> Race/Ethnicity
> Current rank
> Highest degree, and years since highest/terminal degree (a control for experience)
> Date of initial appointment to a continuing appointment at UNM (a control for hire date)
> Promotions through the ranks, and dates of promotions (a control for productivity)
> Department (a control for discipline)
> Part-time vs. full-time status

The control group was white, non-Hispanic, male Full Professors in the comparatively well-paying Chemical & Biological Engineering Department. Three econometric models were developed. The first model estimated total salary, with coefficients indicating the salary difference for each variable compared to the control group. The second model estimated the natural log of faculty salaries, with coefficients thus indicating percentage differences in salaries. These first two models were estimated using data associated with the entire study population. The third model also estimated total salary differences, but was estimated using only non-Hispanic white male faculty members.

Performance was not controlled for in these models by design. The AAUP guide recommends not attempting to control for performance because bias, if it exists, would play a role in performance assessments.

Results of Regression Analyses

The principal findings of the study are that although average salaries of female and minority faculty are lower than those of their counterparts[2], the differences are largely due to factors other than gender, race or ethnicity, as controlled for in the study. Such factors include rank and field of study. Specifically, male faculty members at UNM are more likely than female faculty to have ranks of Full or Distinguished Professor (39% male vs. 22% female), reflecting a legacy of the 1980s and earlier. This trend, as this study documents, has begun to reverse. Similarly, white non-Hispanic faculty at UNM are more likely to have positions in higher paying academic departments, including many in the Engineering or Business schools, whereas minority faculty are more likely to have positions in lower paying departments in the humanities.

Setting aside these nondiscriminatory factors, salary differences between female and minority faculty are relatively small and vary substantially by rank. Indeed, holding constant factors such as rank and field of study, salaries of female faculty members of any race are 0.7% (or, by separate

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[2] Salaries of female faculty are on average 14.6% lower than those of men; salaries of Hispanic faculty are 9.7% lower than those of non-Hispanic faculty; and salaries of non-white faculty are 0.02% less than those of white faculty. However, please see Addendum Five discussing the challenges of inferring meaning from averages when there are headcount discrepancies within faculty ranks as is the case at UNM.

analysis, $123) higher than white, non-Hispanic men. By the same measures, salaries of minority male faculty members are 0.8% ($920) lower those of their white, non-Hispanic counterparts.

There are substantial variations by specific racial and ethnical groups, and by rank. For instance, holding constant factors such as academic field and years since terminal degree, salaries of female Assistant and Associate Professors are 1.2% higher than those of white, non-Hispanic males of the same rank, while salaries of female Full Professors are 1.4% lower than those of more numerous white non-Hispanic male faculty of the same rank. At all ranks, the small number of black faculty, both male and female, earn between 1.6% and 8.1% more than the control group, while both male and female Hispanic white faculty earn between 1.2% and 4.7% less, depending on rank. Best illustrating the complexity of these patterns, salaries of female Native American faculty are between 0.7% and 3.2% lower than white non-Hispanic males, depending on rank, while salaries of male Native American faculty are between 5.6% and 6.8% higher than the same group, all other factors held constant. Finally, with few exceptions, earnings of both female and minority faculty are more favorable at the lower ranks of Associate and especially Assistant Professor.

Notably, the study also showed that probationary faculty at UNM start at relatively equivalent salaries; however, the salaries of women and minorities are more likely to become less competitive after tenure and over time as they move through the promotion ranks. It will be incumbent on UNM to carefully study why this is happening, even if the overall impact is relatively modest.

The entire population of continuing faculty underwent a regression analysis on the basis of the controls and variables described above (n=963). *A regression analysis conducted January 20, 2016, showed that women faculty salaries for the UNM as a whole are 1.72% less than salaries for male faculty, all else being equal (ceteris paribus).* Different demographic and rank groupings of women faculty at the level of UNM as a whole exhibited various negative pay gaps, while some groupings exhibited positive pay gaps. This analysis yielded an adjusted R^2 of 0.8440. In the social sciences, an R^2 above 0.70 is considered to show strong association between the predictor variables and the dependent variable, indicating that most of the variations in the dependent variable have been accounted for by the independent or predictor variables.

The population of tenure and tenure-track faculty only was also separately analyzed (n=822). *A regression analysis for this population conducted March 24, 2016, showed that female professors for UNM as a whole are 1.09% less than salaries for male professors, all else being equal (ceteris paribus).* Different demographic and rank groupings of women faculty at the level of UNM as a whole exhibited various negative pay gaps, while some groupings exhibited positive pay gaps. This analysis yielded an adjusted R^2 of 0.8259.

The figures from these two studies are shown in the charts on the next two pages.

FY14/15 Difference in Predicted Salaries for all Continuing Faculty Relative to White Males of Equivalent Rank (dollars) (n=963)

	Women					Men
	Lecturers	Assistant Professors	Associate Professors	Full Professors	Distinguished Professors	N/A
Hispanic	1,980	-201	-1,070	-3,450	-3,902	-184
African American	4,968	2,787	1,918	-462	-914	1,600
Asian	1,296	-885	-1,754	-4,134	-4,586	-1,716
Native American	1,146	-1,035	-1,904	-4,284	-4,736	5,835
White	2,934	753	-117	-2,497	-2,948	--
Mixed race	5,383	3,202	2,332	-48	-499	-1,162
Unknown Race/ethnicity	2,807	626	-243	-2,623	-3,075	-1,266

FY14/15 Percentage Difference in Predicted Salaries for all Continuing Faculty Relative to White Males of Equivalent Rank (n=963)

	Women					Men
	Lecturers	Assistant Professors	Associate Professors	Full Professors	Distinguished Professors	N/A
Hispanic	0.5	0.0	-1.1	-2.0	2.0	-0.7
African American	5.3	4.7	3.7	2.8	6.8	2.1
Asian	-0.3	-0.9	-1.9	-2.8	1.2	-1.5
Native American	-1.5	-2.1	-3.1	-4.0	0.0	2.7
White	0.8	0.2	-0.8	-1.7	2.3	--
Mixed race	3.4	2.8	1.8	0.8	4.8	-0.7
Unknown Race/ethnicity	0.7	0.1	-0.9	-1.9	2.1	-0.9

FY14/15 Difference in Predicted Salaries for Professorial Ranks Relative to White Males of Equivalent Rank (dollars) (N=822)

	Women				Men
	Assistant Professors	Associate Professors	Full Professors	Distinguished Professors	N/A
Hispanic	-1,004	-983	-4,306	-3,848	-1,131
African American	3,220	3,241	-82	377	3,561
Asian	-2,257	-2,235	-5,558	-5,100	-3,578
Native American	-896	-874	-4,198	-3,739	5,506
White	970	991	-2,332	-1,874	--
Mixed race	4,037	4,059	735	1,194	1,022
Unknown Race/ethnicity	613	635	-2,688	-2,230	-1,184

FY14/15 Percentage Difference in Predicted Salaries for all Professorial Ranks Relative to White Males of Equivalent Rank (n=822)

	Women				Men
	Assistant Professors	Associate Professors	Full Professors	Distinguished Professors	N/A
Hispanic	-0.843	-0.737	-2.597	2.507	-1.077
African American	3.734	3.841	1.981	7.084	4.621
Asian	-2.420	-2.314	-4.174	0.930	-3.119
Native American	-1.528	-1.422	-3.282	1.821	2.564
White	0.667	0.773	-1.086	4.017	--
Mixed race	4.024	4.130	2.270	7.374	1.152
Unknown Race/ethnicity	-0.184	-0.078	-1.937	3.166	-1.073

White Male Model (WMM)

BBER conducted another well-known test of salary equity called the White Male Model (WMM) for both the total population (n=963), and the professorial population subset (n=822). The WMM is widely acknowledged as a useful method for assessing whether salaries potentially reflect the existence of bias in compensation practices or policies. The regression model is estimated using data only for white non-Hispanic male faculty, and results can be used to predict what women (white and minority) and male minority faculty members would make if they were paid comparably to white males. In this way one can calculate the difference between an individual faculty member's actual salary and their salary as predicted by regression analysis of the white male faculty population. The WMM also shows the predicted salaries for the white males. A negative difference indicates that the actual salary is lower than the amount predicted for a white male faculty in the same academic unit with the same attributes. A positive residual indicates that the salary is higher than the predicted value. When BBER applied the WMM to the professoriate data subset (n=822), 30% (249) of women and minorities showed earnings less than the model predicted for them.

Concerns about the Utility of the WMM as a Guide for Revenue Allocations

Initially the advisory group had hoped the WMM predictions could be used to guide or even prescribe salary adjustments. However, when BBER applied the WMM to UNM's faculty, the model produced wide variations and unsupportable predictions for several departments which reviewers attributed to the fact that a significant number of the disciplinary groupings in the study, i.e., 13 departments, did not have the minimum number of white males recommended to obtain valid results. Within UNM's Main campus population of continuing faculty (n=963), 331 faculty members, 239 of whom are women and/or minorities, have academic homes in units with less than 5 white males. Additionally, 15 males in the study population had not declared a race or ethnicity. Having a minimum of five white males in the department was the recommended standard for obtaining valid results (minimum n = $\leq$ 5, as described in the *Paychecks* book).

As a result, the subset of the population for whom the WMM could not reliably be used represented more than 34% of the entire study population (331/963). Attempting to apply the WMM to the professoriate-only subset (n=822) did not improve the outcome. In a third attempt to derive more meaningful predictions from the WMM, it was applied to just the departments with sufficient numbers of white males to meet the model's recommended criteria with similar, questionable results. However, this meant that an alternative methodology for making any equity allocations would have had to be developed for the 34% of the faculty to whom the model could not be applied, creating new concerns about potentially inconsistent methodologies and therefore inequitable outcomes.

Using the department as a control for discipline also proved to be problematic due to the fact that some departmental organizations contain a number of disciplines with different market rates.[3]

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[3] Use of CIP codes would arguably have been a more accurate control for discipline, but CIP codes provide more granularity than UNM's departmental organization structure and actually would have exacerbated the problem of the small 'n' of white non-Hispanic males within many of the departments.

Finally, failure to exclude some salary outliers from the WMM dataset created unrealistic predicted salaries in several departments. For the very reason *current* faculty executives, e.g., provosts, vice presidents, deans, etc., were excluded from the study population, *former* faculty executives who retained administrative compensation to their base salaries upon returning to regular faculty status should also, in hindsight, have been excluded.[4]

As a result of these challenges, Academic Affairs decided it could not reliably use the WMM predictions as a basis for prescribing equity adjustments. However, the WMM still provided insight into which faculty required a close review during the allocation process. The section below entitled *Compensation Adjustments Methodology* describes the equity adjustment methods ultimately used, which relied on a combination of all of the many different analyses that were performed.

Note: Not using the WMM to prescribe adjustments does not impact the overall utility of it, or any of the other regression analyses reported above. All three types of regression analyses proved very useful in pointing to groupings where individuals within the groupings might warrant a careful review for possible equity adjustments.

Overall Assessment of Gender Equity

BBER also provided an overall assessment of the status of gender equity in UNM faculty compensation, comparing measures from the 2006 *AAUP Faculty Gender Equity Indicators* report, UNM's 2007 equity study, and the present analysis. The 2006 *AAUP Faculty Gender Equity Indicators* provided four indicators of gender equity: employment status (i.e., full- and part-time), tenure-track status, attainment of the rank of full professor, and salary. The 2007 UNM equity study provided comparisons of UNM with the national averages published by the AAUP for each of these measures.[5]

The comparison shows that in general these measures of equity have improved at UNM over the last ten years – women comprise greater portions of UNM's full-time faculty, tenured faculty, and full professors than they did in 2004-2005.

The full demographic analysis BBER provided is in Addendum One to this report.

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[4] The practice of allowing faculty administrators to retain administrative pay to their base salary after returning to the regular faculty ranks was curtailed in AY2014/15, when it became apparent it was contributing to compensation inequities. As these individuals retire the effects of this past practice should fall out of the population.

[5] As of June 2016 the AAUP had not updated the *Faculty Gender Equity Indicators*; the 2006 values are therefore the only available national figures.

Study #2 – External Comparison to CUPA National Salary Survey Data

The FY2015/16 compensation rates of Main campus faculty were compared with the average salaries of 76 other public research universities to ascertain whether UNM's salaries are competitive—an important consideration in UNM's ability to recruit and retain faculty.

Population Studied

The population studied contained all tenured, tenure-track faculty, and lecturers with active appointments as of December 31, 2015 (n=976). A small number of current faculty executives, e.g., Provosts, Vice Presidents, Deans, were excluded from the study population by design.

Methodology

Data from the College and University Professional Association for Human Resources (CUPA-HR) Annual Salary Survey "*Faculty in Higher Education Salary Survey: By Discipline, Rank and Tenure Status in Four-Year Colleges and Universities,*" was obtained and used for comparison with UNM compensation rates.

To facilitate the comparison:

➤ A custom CUPA comparison group was constructed consisting of 76 public R1 and R2 universities, as defined by the Carnegie Classification of Institutions of Higher Education, excluding the North East region and California. UNM peers who participated in the survey, as defined by NM Higher Education Department and/or by U.S. Department of Education for NCES purposes, included: Arizona State, Florida International, Texas Tech, Tennessee, Colorado-Boulder, Colorado-Denver, Houston, Nevada-Las Vegas, Oklahoma-Norman, and New Mexico State.

➤ AY2014/2015 CUPA 25th percentile, and median (50th percentile) national salary averages by field and rank, were obtained from the custom comparator group.

➤ A U.S. Dept. of Education Classification of Instructional Programs (CIP) code was assigned to each UNM faculty member with the assistance of the department chairs and deans who were asked to validate the CIP code assignments. CIP codes are used to ascertain the field or subfield in which the faculty member works (CUPA data are arranged by CIP code).

➤ An internal (UNM) median salary by rank and discipline was also calculated by OFAS staff, by field and rank, as a further point for comparison

UNM faculty salaries were compared with national salary percentiles derived from FY2014/15 CUPA annual salary survey data. The CUPA comparison data controlled for rank and discipline as categorized by CIP code.

The aggregate CUPA comparison data set was able to consistently provide CUPA information for tenure and tenure-track faculty (n=832). CUPA values could not be obtained from the comparison group for approximately 16% of the continuing faculty, either because too few salary comparisons per CIP code were available (e.g., lecturers), or the appointment type was not tracked in the CUPA survey data (e.g., librarians and professors of practice).

A Note about Lecturers: CUPA noted in its AY2014/15 CUPA survey summary report that the median average salary of Non-Tenure-Track Teaching Faculty at public universities, as a percentage of Tenured/Tenure-Track salaries, was 86%.[6] This CUPA summary report also provides access to weighted and unweighted averages, by discipline, for Non-Tenure Instructors/Lecturers, and this information is now available to chairs and deans.

Results of the CUPA Comparison Study

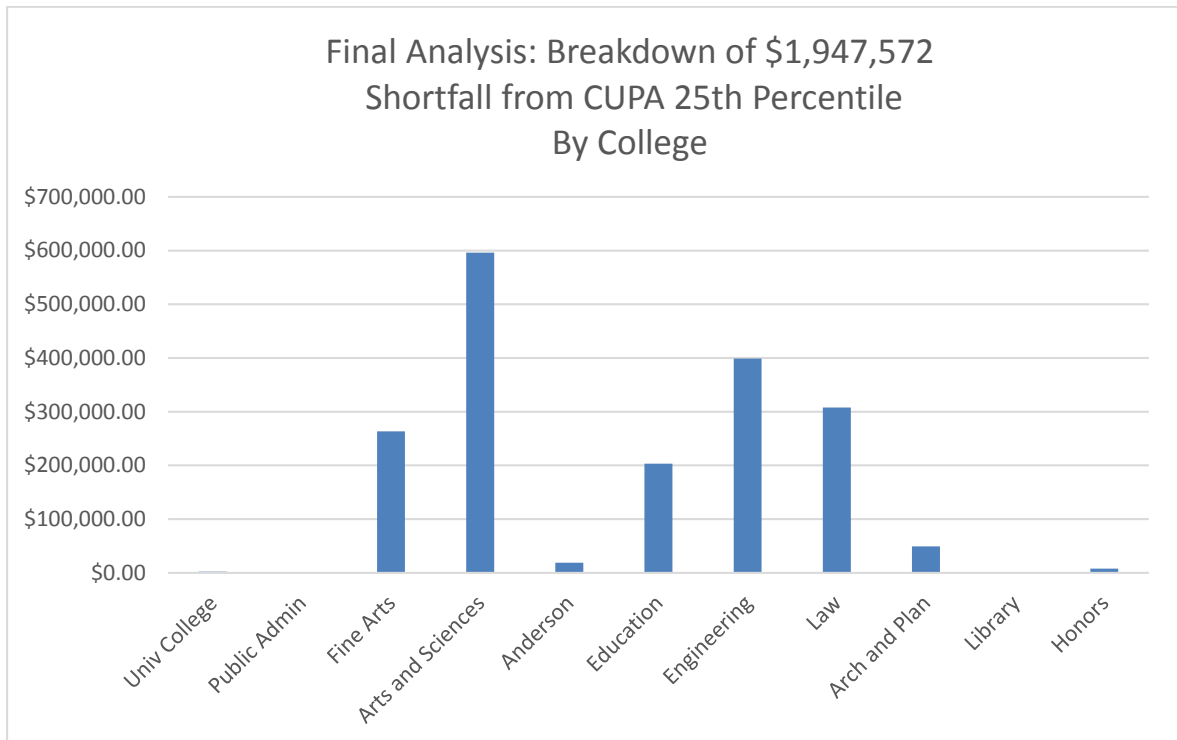For UNM tenure and tenure/track faculty in the aggregate, these results were seen:[7]

➢ 30.2% of UNM tenure and tenure/track faculty are below the CUPA 25th percentile

➢ 55.3% of UNM tenure and tenure/track faculty are below the CUPA 50th percentile (median)

➢ 44.7% of UNM tenure and tenure/track faculty above 50th percentile (median)

➢ $1,947,571 would be needed to bring the salaries of all UNM faculty up to the CUPA 25th percentile

➢ $5,000,138 would be needed to bring the salaries of all UNM faculty up to the CUPA 50th percentile (median)

Graphs below display CUPA comparison percentiles and dollar amounts by college:

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[6] *Faculty in Higher Education Salary Survey for the 2014-15 Academic Year: By Discipline, Rank and Tenure Status in Four-Year Colleges and Universities,* p. 16 (CUPA-HR).

[7] The data reported here reflect the impact of final CIP code assignments following each college's CIP validation process conducted in April, 2016; consequently, the final aggregate percentages and dollar amounts reported here slightly vary from earlier preliminary figures reported to the deans in March 2016.

Final Analysis: Percent of Faculty in Each College Below CUPA 25th Percentile

College	Percent
Univ College	33.3%
Public Admin	0.0%
Fine Arts	62.2%
Arts and Sciences	20.1%
Anderson	21.6%
Education	28.9%
Engineering	48.9%
Law	69.0%
Arch and Plan	36.0%
Library	0.0%
Honors	20.0%

Final Analysis: Breakdown of $1,947,572 Shortfall from CUPA 25th Percentile By College

Final Analysis: Percent of Faculty in Each College Below CUPA Median

College	Percent
Univ College	100.00%
Public Admin	41.67%
Fine Arts	80.00%
Arts and Sciences	42.11%
Anderson	66.67%
Education	65.56%
Engineering	77.66%
Law	82.76%
Arch and Plan	68.00%
Library	3.57%
Honors	40.00%

Final Analysis: Breakdown of $5,000,138 Shortfall from CUPA Median By College
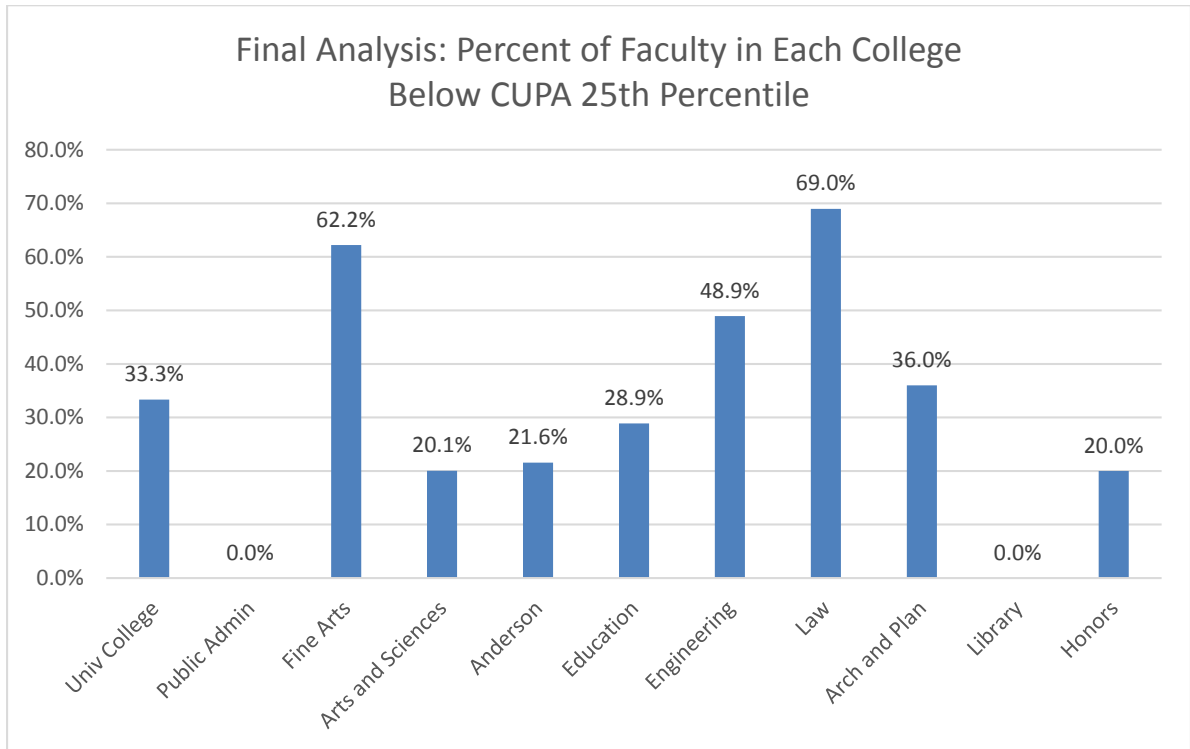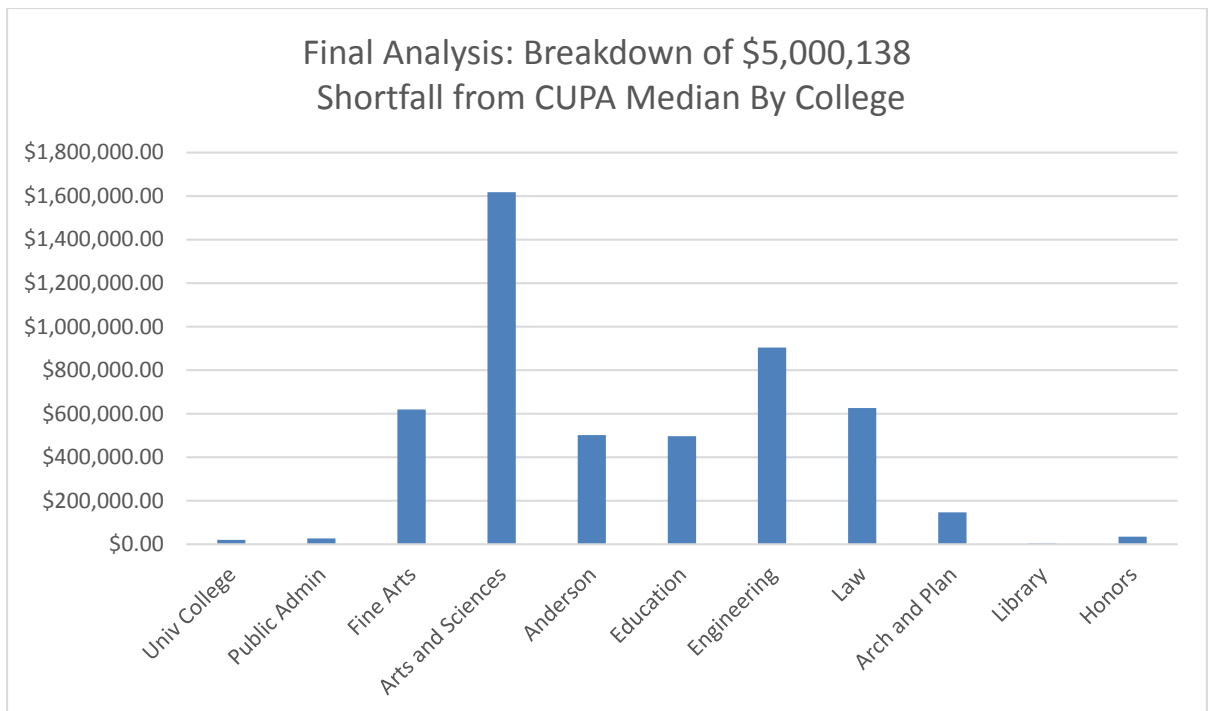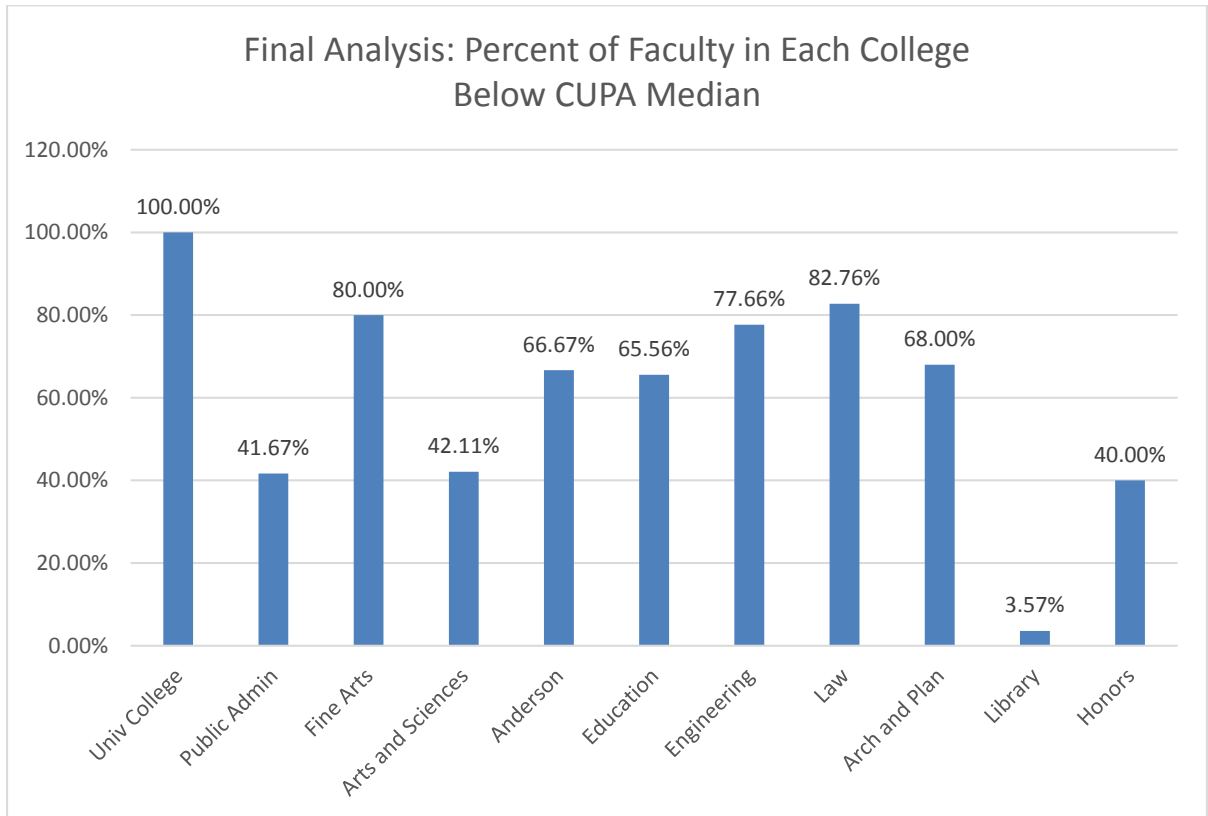
Revenue Allocations and Base Salary Adjustments

College Revenue Allocations

The following amounts were allocated to each college, pro rata, on the basis of a formula derived through consultation with the deans: *50% based on the portion of UNM's faculty I&G payroll each college's continuing faculty salaries represent; and 50% based on the portion of each college's faculty headcount with salaries that fell below the CUPA 25th Percentile.*[8]

College/School	Total Allocation
ABB-University College	$1,895.13
ABC-School of Public Administration	$3,942.11
ABG-College of Fine Arts	$91,710.58
ABH-College of Arts Sciences	$235,669.88
ABI-Anderson School of Management	$39,126.96
ABJ-College of Education	$57,382.01
ABK-School of Engineering	$94,100.44
ABL-School of Law	$37,533.46
ABM-School of Architecture Planning	$19,378.93
ABN-University Libraries	$14,258.99
ABS-Honors College	$5,001.50
Grand Total	**$600,000.00**

Compensation Adjustments Methodology

The revenue allocation could only be used to remedy disparities in salaries on the basis of gender, race or ethnicity (Equity); to remedy evidence of salary compression or inversion by rank (Compression); or to address retention concerns (Retention). *In other words, this revenue could not be used for regular merit increases.*

The revenue could only be distributed to individuals listed on a spreadsheet provided by the Office of Faculty Affairs and Services (OFAS) which combined each college or school's results from both the BBER regression analysis (Study #1) and from the CUPA comparison (Study #2) (n=976). Faculty demographic information was provided as well. Internal medians by college, rank and discipline defined by CIP code as of FY2015/16, were also calculated and provided on each college's spreadsheet. Salary adjustments had to be informed by these data and had to be consistent with

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[8] The formula for the College of University Libraries and Learning Science is the exception since 80% of ULLS faculty do not have CUPA data. Therefore, the ULLS allocation was weighted differently and the portion based on salary represents 90% of the allocation, and the CUPA portion represents 10%.

the guidelines described below. Deans could use additional data sources to guide adjustments, e.g., salary survey data from other professional associations, etc., provided they first discussed doing so with the Senior Vice Provost.[9]

The data from these studies were useful for providing insight into which groupings of faculty warranted close review to assess whether various individuals are appropriately compensated.

Equity Adjustment Guidelines

Deans were advised to use the regression analysis data for UNM's professoriate as a whole (n=822) to look for individuals within the analyzed groupings who may potentially reflect more substantive salary differences, either positive or negative, than their peers with comparable experience.

They were further advised that UNM is required to ensure its employees receive comparable pay for comparable work. Any shortfall in predicted salaries that appears to be due to gender, race or ethnicity, no matter how small, must be carefully reviewed, and all appropriate measures must be taken to address such occurrences when found. Therefore, it was paramount that revenue allocations be used to make adjustments for women and/or minority faculty if there were indications in the data of lower salaries than for males and/or White/Non-Hispanic faculty with similar rank and discipline. Similarly, in departments that are demographically predominantly women and/or minorities, it would be appropriate to make adjustments for males and/or White/Non-Hispanic faculty if there are indications they have lower salaries than women and/or minority faculty with similar rank and discipline.

Implementing this strategy required a two-step analysis:

1. Compare females to males of similar rank and discipline to determine if there is evidence any females or males warrant an adjustment, and adjust accordingly.

2. Concurrently, compare of minorities to non-minorities of similar rank and discipline to determine if there is evidence any minorities warrant an adjustment, and adjust accordingly.

Demographic information about UNM's Main campus faculty at the aggregate level was provided; deans were advised that graphs could be prepared for their units by OFAS if they wished.

Compression Adjustment Guidelines

Using non-discriminatory factors, the available revenue could also be used to make adjustments targeting problems of salary compression or inversion by rank, as seen in CUPA and internal median data and/or scatter plots, etc. An example of an appropriate methodology would be to allocate the revenue in a way that brings every faculty member up to a minimum, predetermined

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[9] This was appropriate for librarians for whom CUPA comparisons were not available.

percentile of the CUPA salary data.   Adjustments for librarians, lecturers and professors of practice had to be guided by other data such as internal medians and scatterplots.

Retention Adjustment Guidelines

Using non-discriminatory factors, the revenue available could also be used to make adjustments targeting retention problems. Any proposed retention adjustment that would exceed the CUPA median had to be approved by the Provost on the basis of additional documentary evidence, e.g., outside offers.

Off-Sets for Retirement or Separation

No base salary increases could be directed toward individuals initially listed in the data set who separated or retired as of FY2016/17.

Off-Sets for Performance

Deans could choose to rebut a presumption created by the data that an increase is warranted, if there was documentary evidence that a salary is lower than one would predict due to poor performance.   However, any such offsets underwent a close review by Academic Affairs and the University Counsel's Office before the offset was allowed.

Preliminary Analysis of Impact of the $600,000 Allocation

The impact of the $600,000 allocation continues to be analyzed, and full results will be reported in the final version of this report which will be released later this year.   However, preliminary results shown below indicate that the adjustments predominantly went to women and minorities among the tenured ranks of the faculty – consistent with the insight obtained from the internal equity regression analysis (Study #1), which revealed that while probationary faculty start at relatively equivalent salaries, the salaries of women and minorities are more likely to become less competitive over time, as they move through the ranks. Thus the preliminary analysis of the impact of the $600,000 allocation shows that an appropriate portion of the adjustments targeted this sector of the faculty.

A total of 254 faculty received base salary adjustments effective AY2016/2017 as a result of this project. Of the 254 faulty who received increases, 129 (51%) were women, and 83 (31%) were minorities. Because the available revenue was initially budgeted in FY2015/16—before both studies could be completed—in addition to permanent base increases effective FY2016/17, faculty recipients also received one-time supplements (lump-sum) equal to an additional year of their base increases. This was in lieu of having received the base adjustment during FY2015/16. The lump

sum supplement was paid in the August 31, 2016 paycheck, which is also when the new recurring adjustments first took effect.[10]

$600,000 Allocation Distribution	
Total Number of Allocations	254
Median Compensation Adjustment	$1,410.88
Average Compensation Adjustment	$2,252.94

Percent of Main Campus Faculty Receiving Compensation Adjustments by Rank			
Rank	**Total Adjusted of all Faculty**	**Total Women Adjusted of all Women**	**Total Minorities Adjusted of all Minorities**
Professor (Including Distinguished)	32%	47%	45%
Associate Professor	33%	37%	32%
Assistant Professor	24%	25%	26%
Lecturer (All Titles)	10%	12%	27%

Percent of Faculty Receiving Compensation Adjustments by College			
College/School[11]	**Total Adjusted of all Faculty**	**Total Adjusted of all Women**	**Total Adjusted of all Minorities**
University College UC	33%	50%	33%
College of Fine Arts CFA	20%	11%	29%
College of Arts Sciences A&S	34%	42%	45%
Anderson Schools of Management ASM	23%	27%	26%
College of Education COE	17%	15%	20%
School of Engineering	16%	18%	14%
School of Architecture Planning	15%	9%	22%
University Libraries	23%	37%	29%
Honors College	40%	33%	0%
Grand Total	**27%**	**31%**	**33%**

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[10] Faculty with fiscal-year contracts such as Librarians, received their supplemental payments in the July 31, 2016 paycheck.

[11] The Law School requested an extension of time until January 2017 to determine an appropriate distribution methodology and thus law faculty allocation results are not included in this preliminary report.

Future Initiatives

It will be important to understand the root causes of why the salaries of women and minorities are more likely than white males to become less competitive over time.   Is it because women and minorities seek promotion in rank at different rates than do non-minority men, as some have hypothesized?   Does the fact that probationary faculty at UNM have equivalent compensation rates regardless of gender or ethnicity mean that this problem will self-correct over time, or will it take policy adjustments to close the gap completely?   We will continue to assess this situation going forward.

A review of current Main campus faculty compensation policies will occur in AY2016/17, guided by the faculty advisory committee and informed by the data obtained during the AY2015/16 studies. The ultimate goals of these efforts are to ensure that current faculty compensation rates are equitable and fair, and that UNM's faculty compensation policies support equity and encourage and reward faculty productivity and innovation.

Future efforts include:

➢ Complete the analysis of the impact of $600,000 allocation to determine its full effect on closing the identified shortfalls, and update this report. Timeline: Fall Semester 2016; final report completion target January 2017.

➢ Review Main campus compensation policies and practices, and best practices of other universities, to inform compensation policies in the future.   Timeline: Academic Year 2016/2017; completion target May 2017

➢ Review compensation rates at UNM's Branch campuses for equity and market competitiveness. Timeline: Academic Year 2016/2017; completion target December 2016

➢ Continue to use CUPA data to inform Main campus compensation studies now that we have established baselines for comparison. Timeline: Biennial analyses hereafter

➢ Create Dashboards to more easily provide compensation data to Chairs and Deans to inform offers at hire, and merit and retention adjustments in the future. Timeline: January 2017
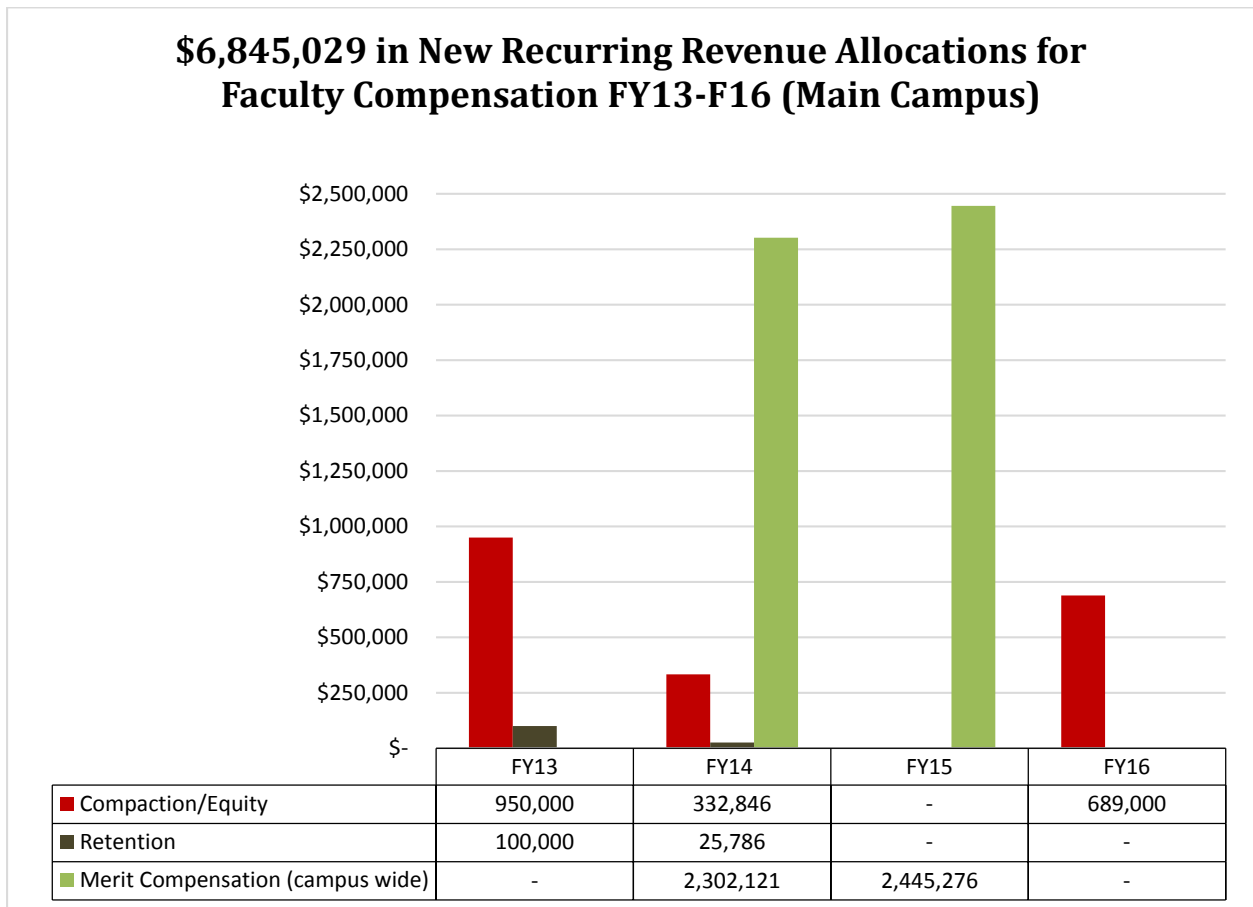
Previous Compensation Studies at UNM

UNM has worked for several years to ensure that it is meeting its commitment to the principle of comparable pay for comparable work for all of its employees, including women and under-represented groups.

2007   An [Equity Analysis Report](#) of UNM faculty compensation rates was conducted by then Provost Reed Dassenbrock. After controlling for productivity and department affiliation, some small unexplained gaps remained. Efforts to eliminate unexplained gaps commenced but were slowed by revenue shortfalls and rescissions due to the Great Recession.

2011-2013   As the revenue picture stabilized, adjustment efforts were renewed by current Provost Chaouki Abdallah. In 2011 a study of potential salary inequities and/or compression was initiated by Academic Affairs. Schools and departments were asked to identify faculty whose salaries reflected compression or inversion by rank.   Academic Affairs reviewed adjustment recommendations and made compensation adjustments effective FY2013. An appeal process was provided, overseen by a faculty committee and the Associate Provost for Academic Personnel, who made a second round of adjustments effective FY2014. The 3-year process resulted in allocating nearly $2 million in new recurring revenue for salary adjustments, with a particular emphasis on targeting potential gender or ethnicity inequities.

Total Revenue Allocated for Main Campus Faculty Compensation Increases FY13 through FY16

The chart below shows the new recurring revenue allocated by Academic Affairs for Main campus faculty base salary increases during the past four fiscal years. $2,097,632 has been allocated for addressing equity, compaction and retention concerns. In addition, another $4,747,397 was made available for merit increases on campus wide. The total allocated across all categories during this four-year period is $6,845,029.

$6,845,029 in New Recurring Revenue Allocations for Faculty Compensation FY13-F16 (Main Campus)

	FY13	FY14	FY15	FY16
■ Compaction/Equity	950,000	332,846	-	689,000
■ Retention	100,000	25,786	-	-
■ Merit Compensation (campus wide)	-	2,302,121	2,445,276	-

*FY16 breakdown between equity, compaction and retention is still being calculated.

Addendum One – BBER's Overall Equity Assessment for Main Campus Faculty as of AY2014/15

This addendum, prepared by BBER, describes UNM's Main campus continuing full- and part-time faculty (including lecturers) as of December 31, 2014, with the exception of Professors of Practice, Deans, the Provost, and Vice Provosts (n=964). It is based on an analysis of the data set provided to BBER for the regression analyses of modeling work BBER undertook.

NOTE: One tenured individual was later removed from the study population due to inconsistencies in the record with respect to credentials. This is why the study population reported here (n=964) varies by one from the data reported in the body of report (n=963).

To provide an overall assessment of the status of gender equity in UNM faculty compensation, BBER compared measures from the 2006 *AAUP Faculty Gender Equity Indicators* report, UNM's 2007 equity study, and the present analysis. The 2006 *AAUP Faculty Gender Equity Indicators* provided four indicators of gender equity: employment status (i.e., full- and part-time), tenure-track status, attainment of the rank of full professor, and salary. The 2007 UNM equity study provided comparisons of UNM with the national averages published by the AAUP for each of these measures.

Table 1 (below) provides the 2006 national averages, the 2004-2005 UNM values, and updated 2014 UNM values for each of these measures.[12] The values in Table 1 indicate that in general these measures of equity have improved at UNM over the last ten years – women comprise greater portions of UNM's full-time faculty, tenured faculty, and full professors than they did in 2004-2005.

Table 1. Broad measures of gender equity nationally and at UNM

	National Average 2005-06	UNM Main Campus 2004-05	2014
Indicator 1: Employment Status			
Percent of full-time faculty who are women	34.4	40.1	44.7
Percent of part-time faculty who are women	47.9	--	43.5
Indicator 2: Tenure Status			
Percent non-tenure track who are women	53.8	50.0	58.9
Percent tenure track who are women	41.0	43.2	42.2
Percent tenured who are women*	26.0	36.7	40.9
Indicator 3: Full Professor Status			
Percent of full professors who are women	19.2	26.5	31.2
Indicator 4: Women's salary as % of men's			
Full Professors**	90.8	94.7	93.9
Associate Professors	92.8	91.0	91.7
Assistant Professors	91.6	89.8	96.5
Lecturers & Instructors	--	--	89.1
All	78.6	84.9	85.4

Sources: AAUP Faculty Gender Equity Indicators 2006 (Curtis and West, 2006); Faculty Compensation at UNM: Is the Reward System Equitable? (Binder et al. 2007); UNM Provost's Office. Note: All 2014 UNM salaries are as of 12/31/14, and have been converted to 9-month 1.0 FTE salaries. 2014 values were calculated using Information pertaining to 964 full- and part-time professors (N=964). Professors of Practice, Deans, the Provost, and Vice Provosts were excluded. *Lecturers are not included in calculations; percentages are calculated as a portion of tenure-track faculty only. **Full Professors includes Distinguished Professors.

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[12] As of June 2016 the AAUP had not updated the *Faculty Gender Equity Indicators*; the 2006 values are therefore the only available national figures.

Table 2 (below) considers the data from a different perspective – rather than presenting the percent of various faculty categories (part-time, full-time, non-tenure track, tenured, etc.) that are women, Table _ presents the percent of men, women, and various race & ethnic groups that are in the various categories. The information in Table 2 indicates that women and Blacks are less likely to be in tenure track positions than their counterparts. In addition, Asians, Blacks, and American Indians are less likely to be tenured and less likely to achieve the rank of either Full or Distinguished Professor relative to whites. Furthermore, female and Hispanic faculty members' average salaries are consistently lower than those of their counterparts, while many racial minority groups' average salaries tend to be higher than those of their White counterparts.

Table 2. Broad measures of racial and ethnic equity at UNM

	White	Hispanic	Native American	African American	Asian
Indicator 1: Employment Status					
Percent that are full-time faculty	94.6	97.5	97.4	96.7	95.5
Percent that are part-time faculty	5.4	2.5	2.6	3.3	4.5
Indicator 2: Tenure Status					
Percent non-tenure track	16.1	18.5	5.3	30.0	6.7
Percent tenure track	83.9	81.5	94.7	70.0	93.3
Percent tenured*	75.6	73.2	66.7	61.9	66.3
Indicator 3: Full Professor Status					
Percent that are full professors**	42.0	29.9	27.8	23.8	32.5
Indicator 4: Average salary as % of white faculty members'					
Full Professors	--	96.3	110.9	105.7	107.3
Associate Professors	--	95.3	86.7	109.7	111.6
Assistant Professors	--	99.6	102.4	90.6	114.7
Lecturers & Instructors	--	96.2	90.6	101.0	105.9
All	--	92.0	98.5	90.3	110.6

Source: UNM Provost's Office. Note: 2014 UNM salaries are as of 12/31/14, and have been converted to 9-month 1.0 FTE salaries. 2014 values were calculated using Information pertaining to 964 full- and part-time professors (N=964); Professors of Practice, Deans, the Provost, and Vice Provosts were excluded. *Lecturers are not included in calculations; percentages are calculated as a portion of tenure-track faculty only. **Full professors includes Distinguished Professors.

It is expected that faculty with more prior experience and/or more years of service will have higher salaries than faculty with little or no prior experience and/or who have been at UNM for a short period of time. The following three figures depict how years of experience prior to hire at UNM (captured using years since the terminal degree was obtained) varies by gender, race (simplified as white vs. non-white), and ethnicity. The graphs consistently illustrate that a greater proportion of minority faculty members (women, non-whites, and Hispanics) were hired by UNM with less prior experience than were their non-minority counterparts (men, whites, and non-Hispanics). At the high end of the prior experience spectrum, the graphs illustrate that in comparison to non-minorities, relatively few women, non-whites, or Hispanics are hired with a large number of years of prior experience.

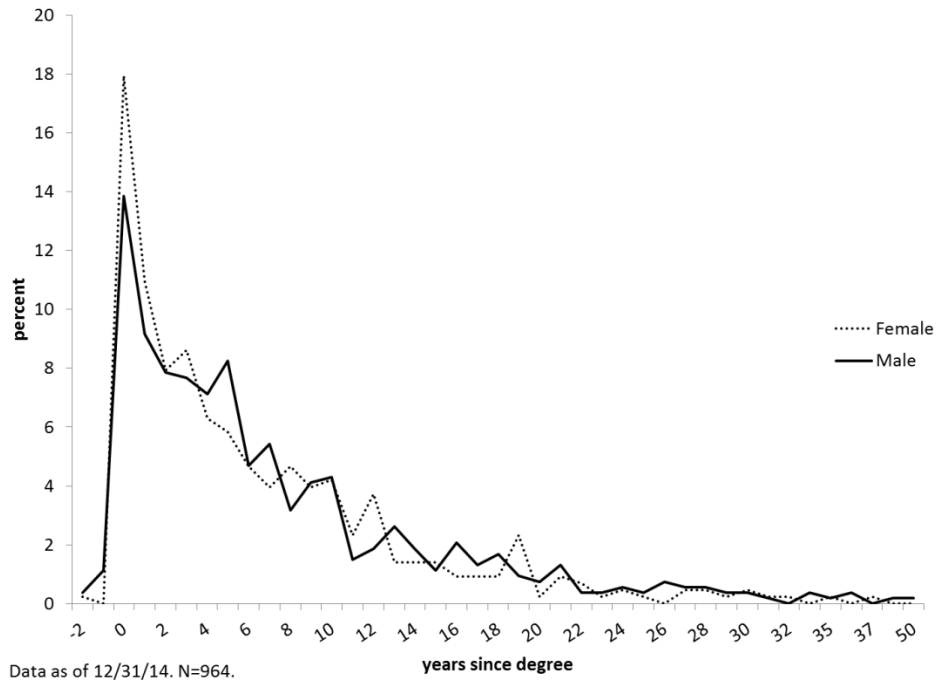## Figure 1. Faculty distribution by gender and years since degree at time of hire

Data as of 12/31/14. N=964.

Figure 2. Faculty distribution by race and years since degree at time of hire

Data as of 12/31/14. N=964.

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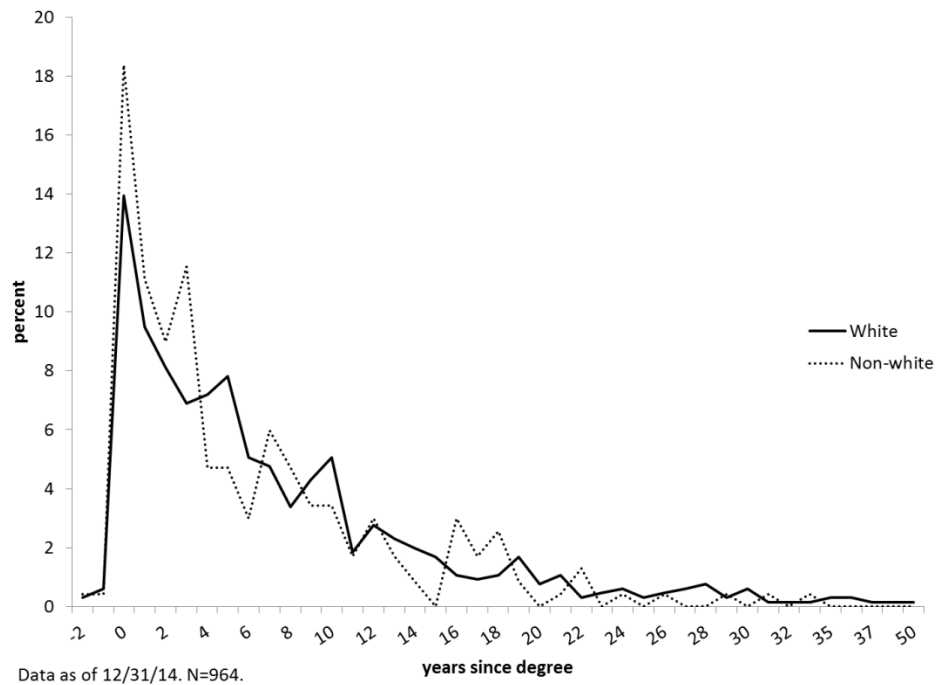
Figure 3. Faculty distribution by ethnicity and years since degree at time of hire

Data as of 12/31/14. N=964.
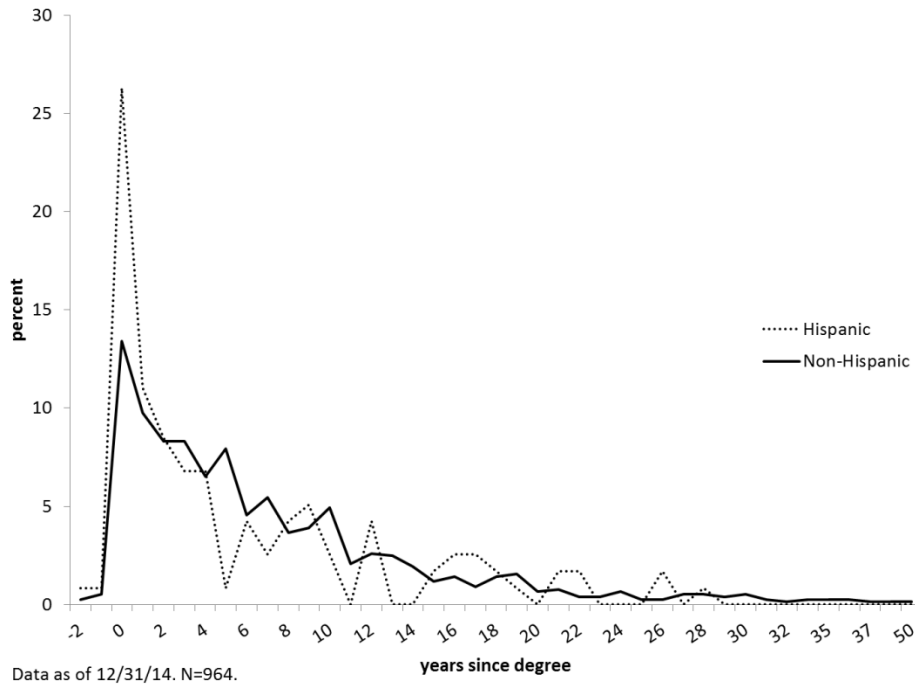
The figures below depict how years of service at UNM differs by gender, ethnicity, and race. The graphs reflect the fact that women and minorities are hired more frequently now than in the past; relative to male, white, and non-Hispanic faculty, a greater portion of women and minorities have been at UNM a somewhat shorter period of time. As a result, male faculty on average have nearly 12 years of service at UNM, while female faculty on average have 10 years of service at UNM. A similar story holds true for racial and ethnic minorities. Non-Hispanics have an average of 12.5 years at UNM, while Hispanic faculty have an average of 10 years of service at UNM. Among racial groups, white faculty have the greatest number of years of service – nearly 13 years. Most other racial groups have approximately 10 years of service, while those of unknown racial background on average have fewer than 4 years of service at UNM. These differences in years of service at UNM may in part explain salary differentials for women and minorities.

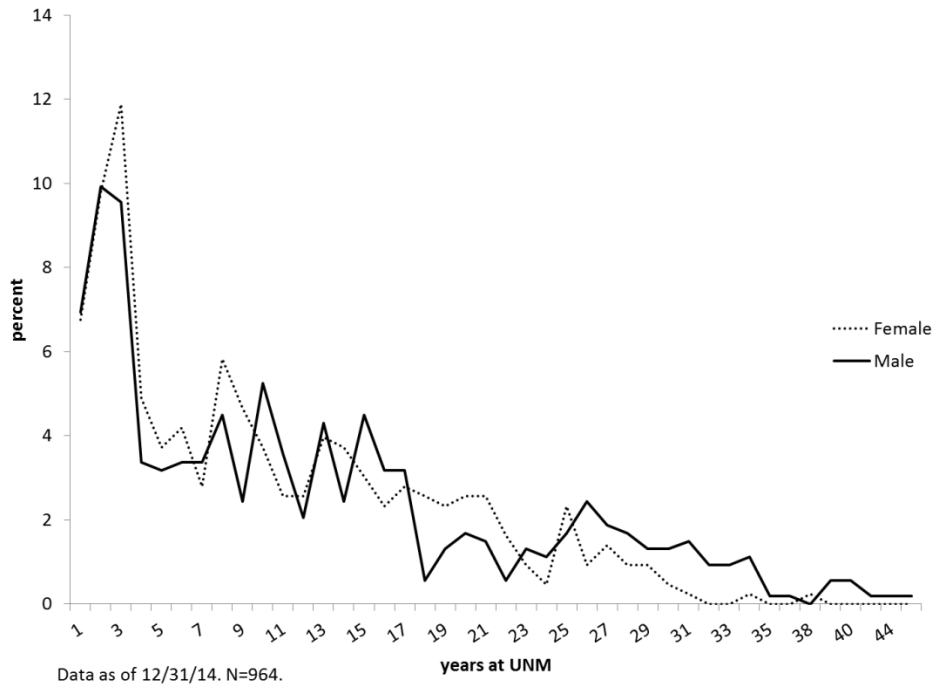## Figure 4. Faculty distribution by gender and years at UNM

Data as of 12/31/14. N=964.

Figure 5. Faculty distribution by race and years at UNM

Data as of 12/31/14. N=964.
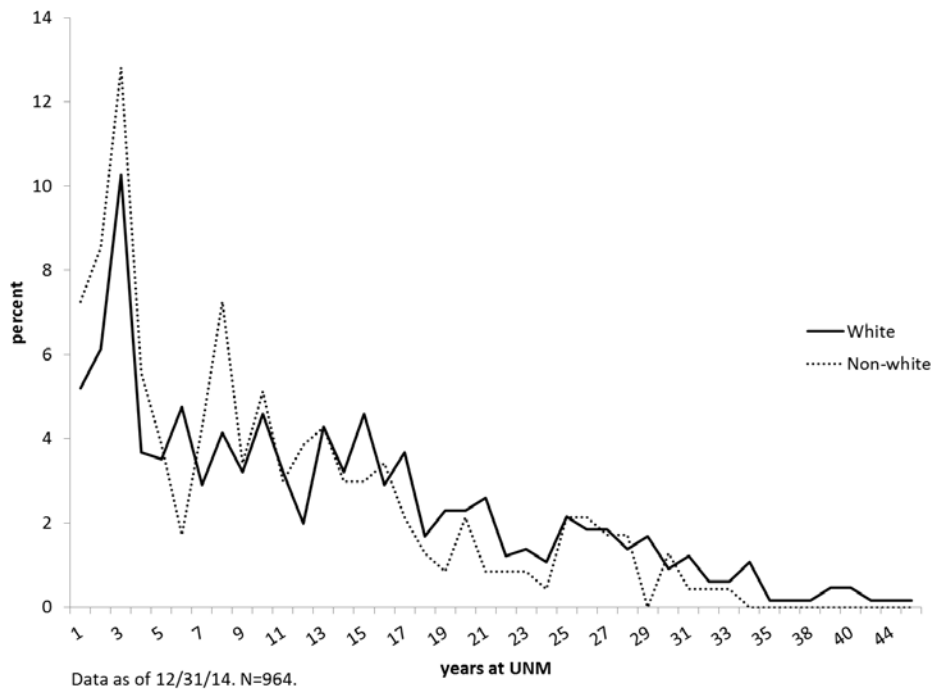
Figure 6. Faculty distribution by ethnicity and years at UNM

Data as of 12/31/14. N=964.
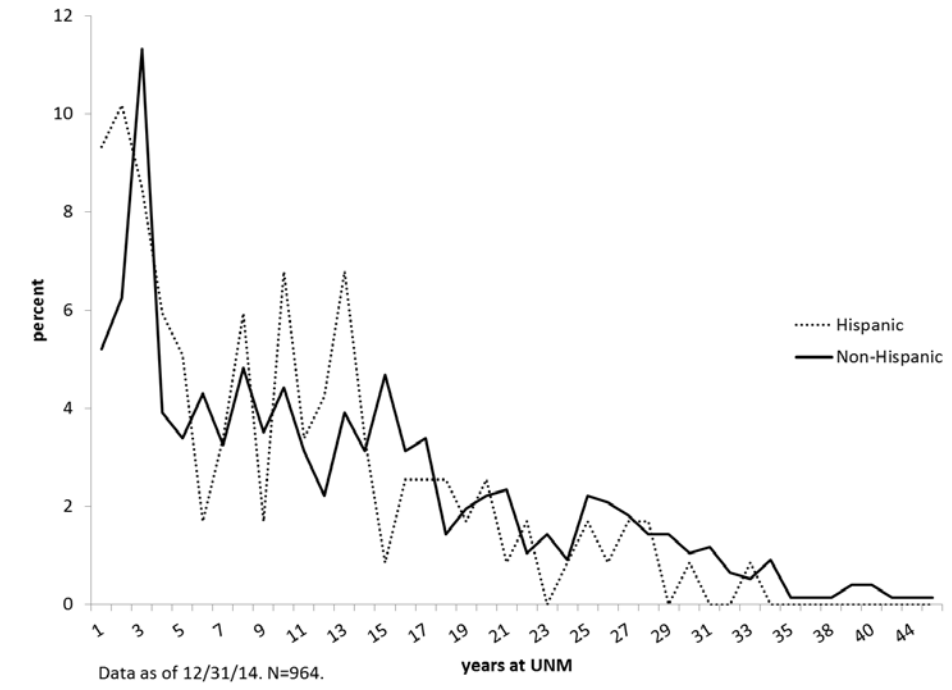
Rank impacts faculty salaries as well, and thus we examine the distribution of faculty across rank by gender, race, and ethnicity. As is depicted in the following figure, relative to female faculty members, men are much less likely to be lecturers and associate professors but much more likely to be full professors or distinguished professors. When assessed by race (simplified to white vs. non-white), we find that whites are notably more likely to be lecturers and full professors, while non-whites are more likely to be assistant and associate professors (see

Figure 8). Finally, sizable differences in current rank also occur across ethnic groups – non-Hispanics are more likely to be professors or distinguished professors, while Hispanics are more likely to be lecturers or associate professors. These differences in rank may account for part of the pay disparities that exist among UNM's faculty.

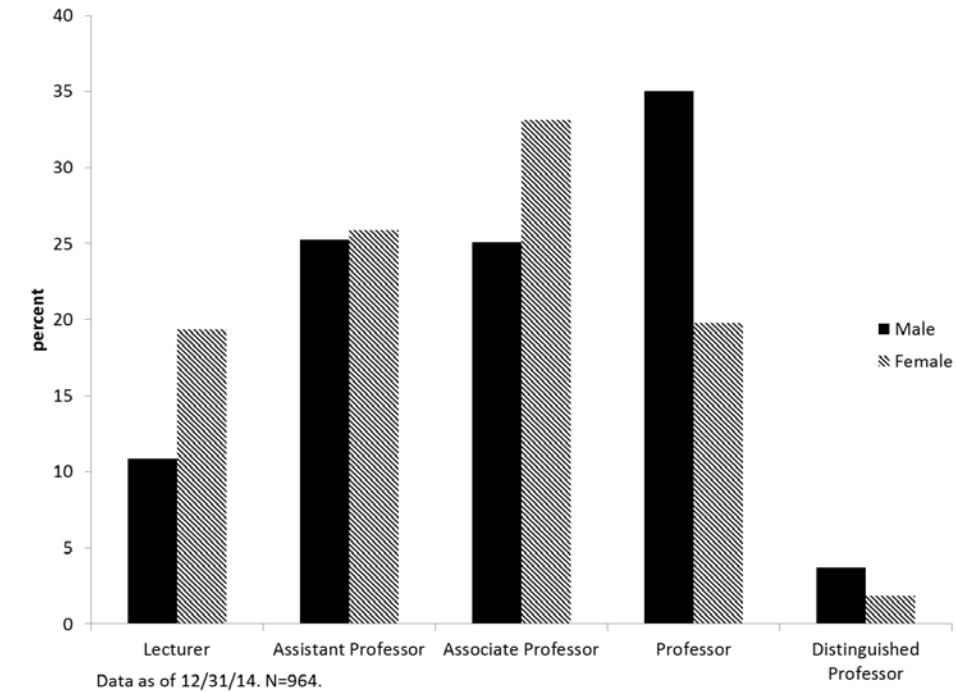## Figure 7. Distribution of faculty by gender and current rank
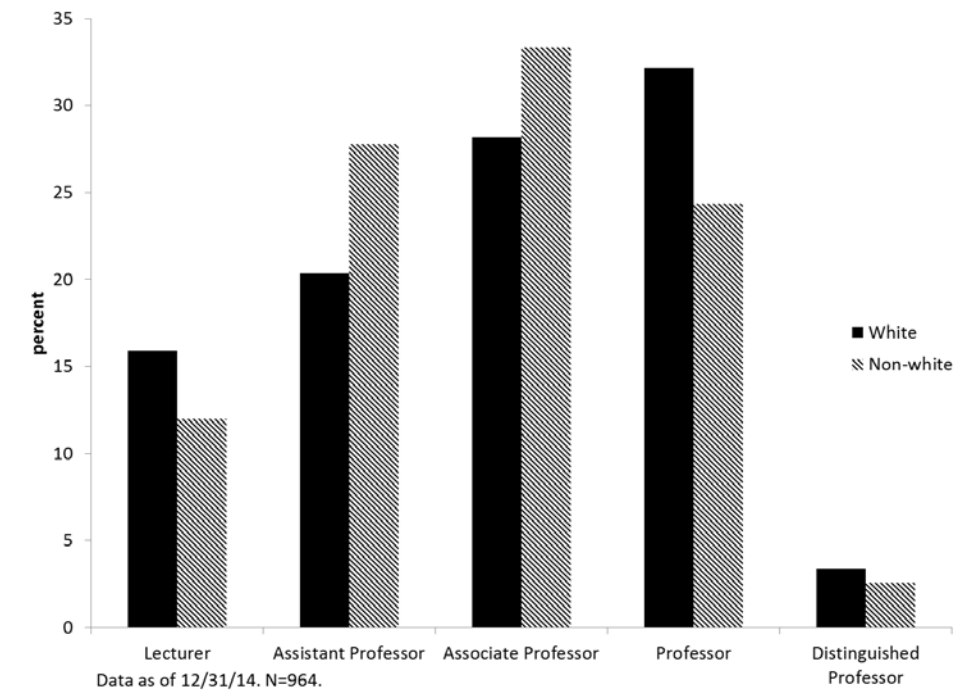

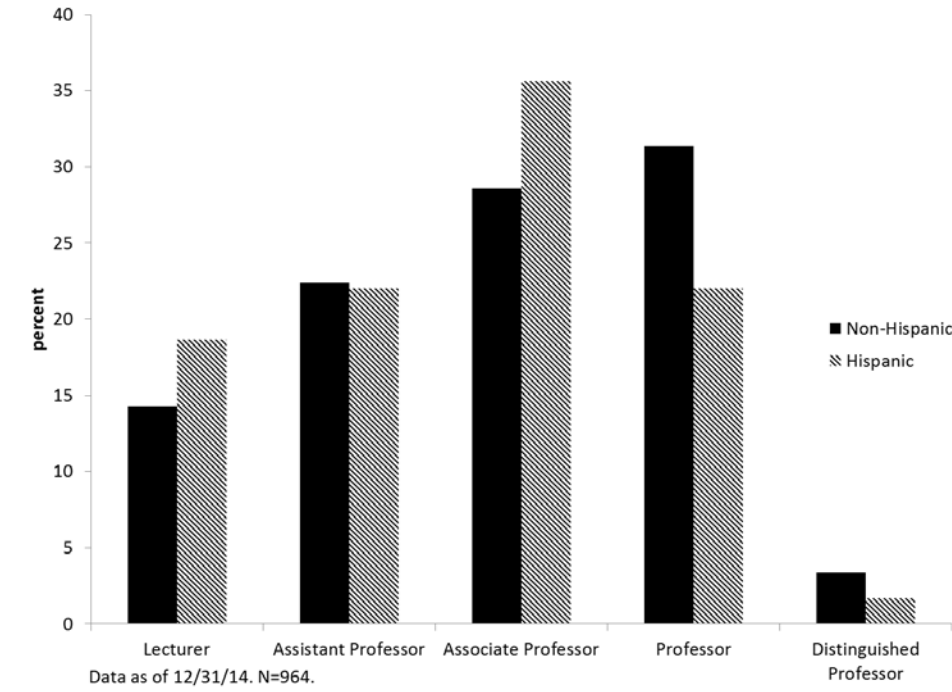## Figure 8. Distribution of faculty by race and current rank

Figure 9. Distribution of faculty by ethnicity and current rank


Data as of 12/31/14. N=964.

Addendum Two – Demographic Profile of Main Campus Continuing Faculty as Annually Reported to the U.S. Department of Education (IPEDS) (FY2011/12 – FY2015/16)

For comparison of UNM's faculty demographic profile with that of other public flagship universities, please see: Ben Myers, "The Flagship Diversity Divide: The student bodies at large state universities are more diverse than the faculties. But the broader population outpaces them both." (Chronicle of Higher Education, January 5, 2016) http://www.chronicle.com/interactives/flagship-diversity
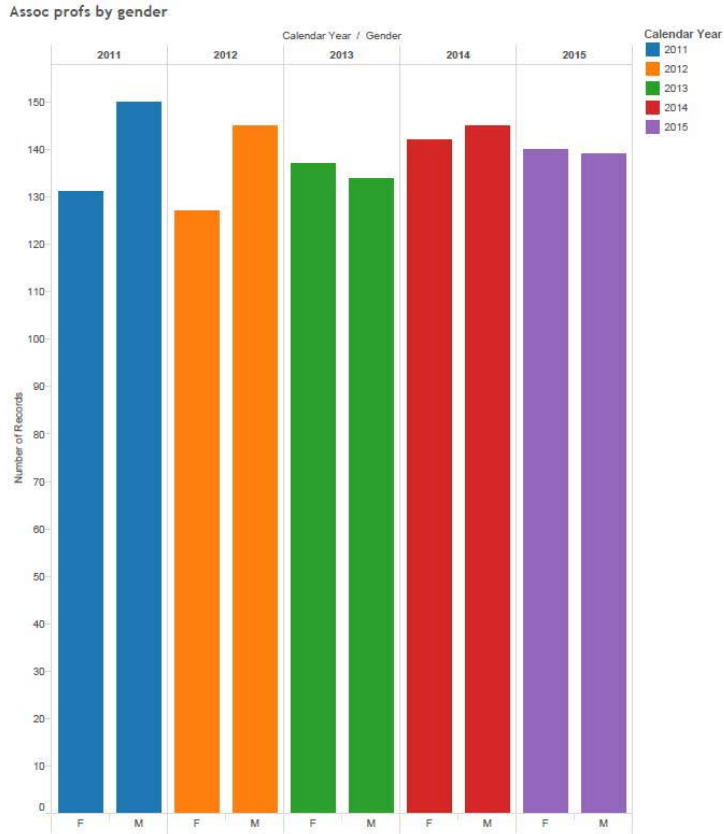
UNM Professors by Gender
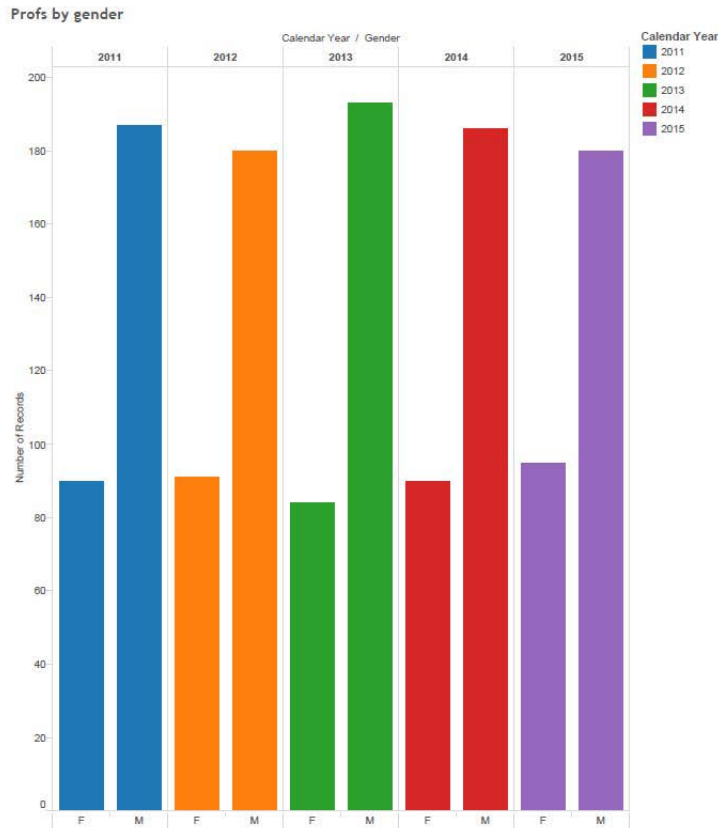
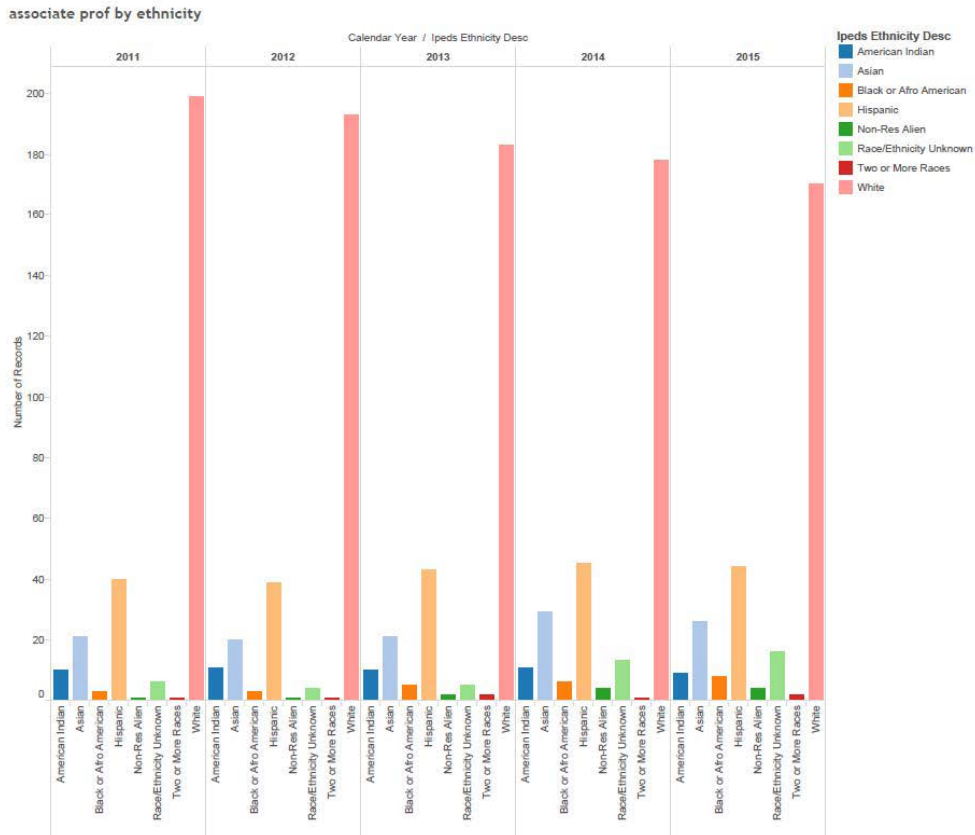# UNM Professors by Race or Ethnicity
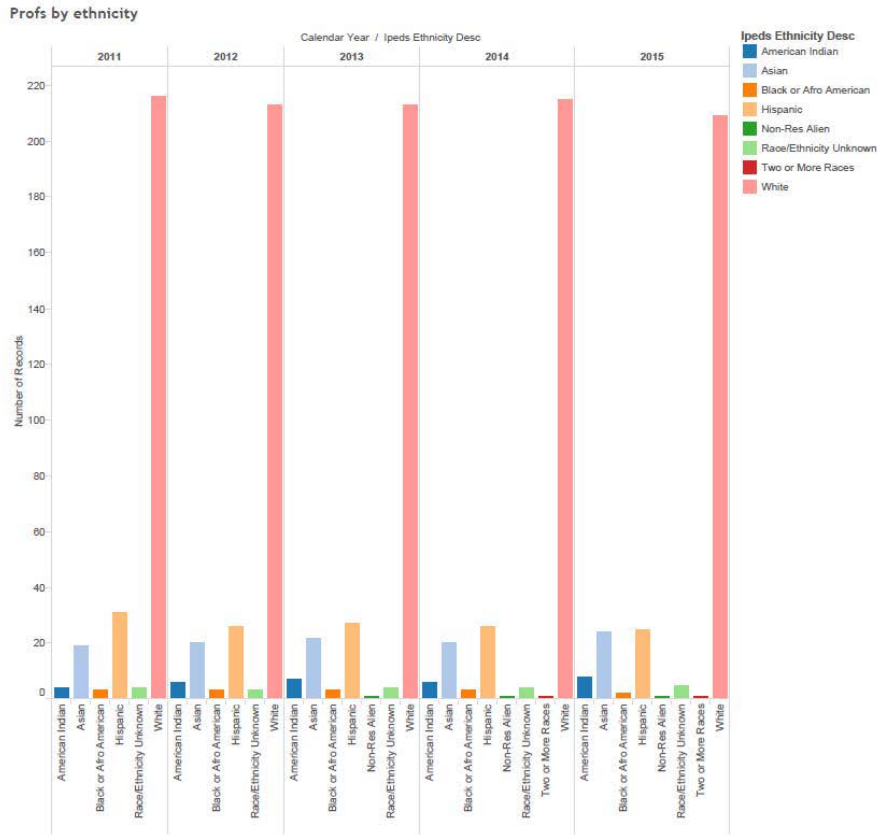
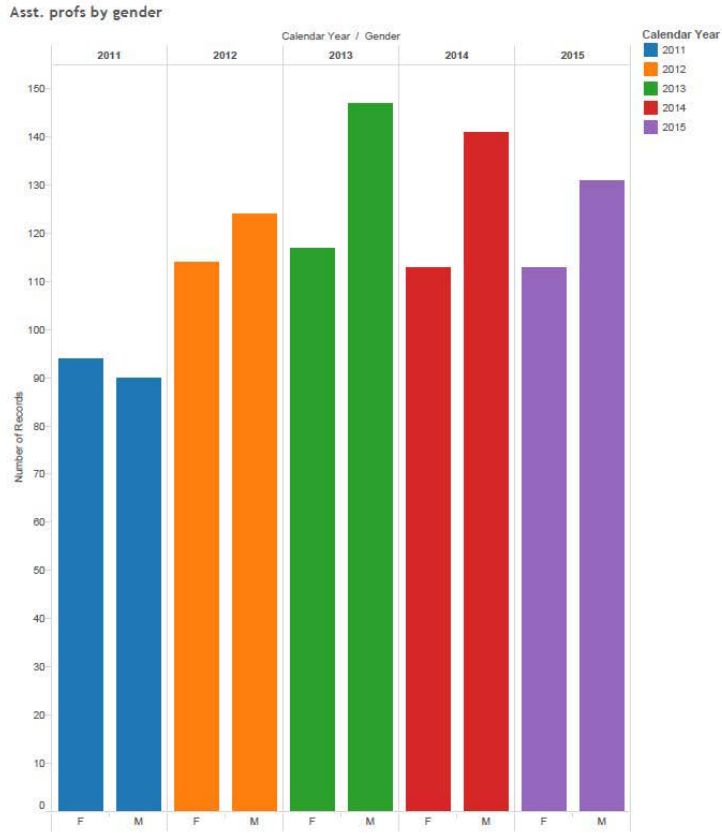# UNM Associate Professors by Gender

Assoc profs by gender

UNM Associate Professors by Race or Ethnicity

associate prof by ethnicity

UNM Assistant Professors by Gender

UNM Assistant Professors by Race or Ethnicity

Asst. Prof by Ethnicity
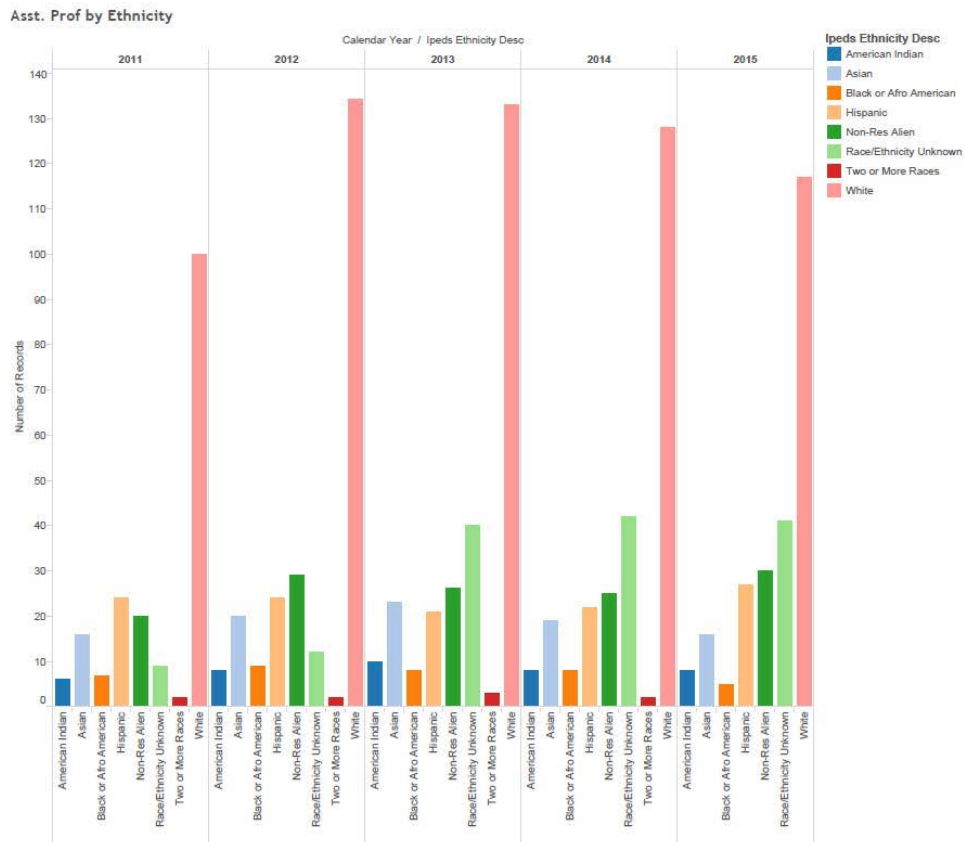
UNM Lecturers by Gender
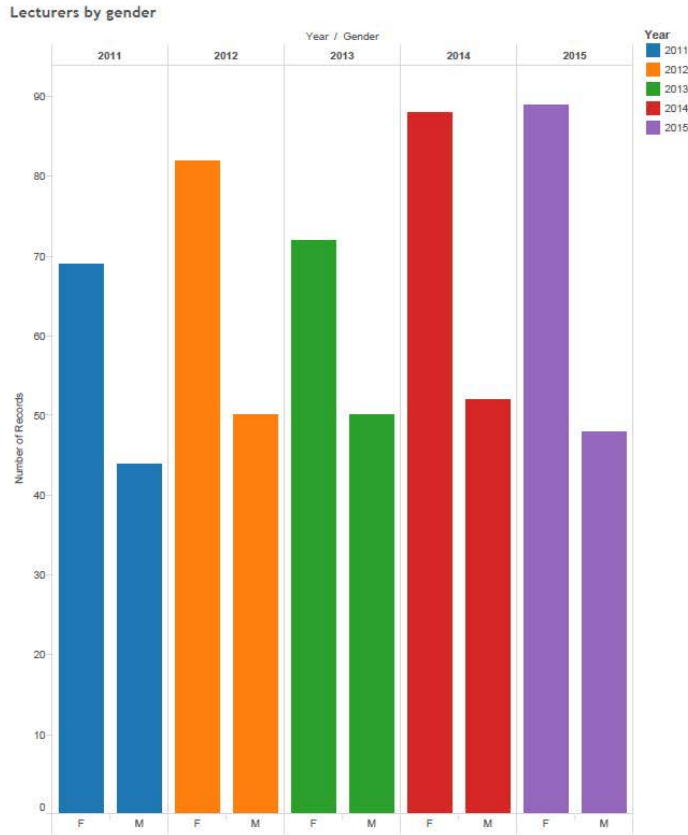
UNM Lecturers by Race or Ethnicity

Addendum Three – Study #1 (BBER) Econometric Models and Explanatory Variables

Econometric Models

Following Haignere (2002), we assess variations in pay using the three regression models most commonly used in the relevant literature. Below we detail the final form of the three econometric models used to inform the process of allocating funds for the purpose of addressing pay variations among professors on UNM's main campus. The models were developed through an iterative process of model estimation and analysis, followed by faculty oversight committee meetings in which results were reviewed and discussed. During this process the faculty oversight committee and Provost Office employees held primary responsibility for decisions regarding modeling form and methods, while BBER employees held primary responsibility for executing the modeling efforts. Summary information regarding earlier versions of the models and decisions made pertaining to those models is provided after the discussion of the final form of the models.

Base salary (**salary**) is the variable of interest; we assess whether there are significant differences in the base salaries (i.e., salary excluding Special Administrative Component, or SAC) paid to non-Hispanic white male professors and those paid to female and/or minority professors on UNM's main campus. To develop a consistent measure of base salary we convert all salaries to 9-month full-time-equivalent salaries. This is accomplished by converting all part-time salaries to full-time-equivalent salaries, and subsequently converting salaries for faculty with 12-month appointments from a 12-month salary to a 9-month salary.[13]

Model 1 estimates base salary as a function of gender, race, ethnicity, part-time status, highest degree, current rank, years in rank, years since degree, and department:

$$
\begin{aligned}
Salary = {} & \alpha + \beta_1 Female + \beta_2 \overrightarrow{Race} + \beta_3 Female * \overrightarrow{Race} + \beta_4 Hispanic + \beta_5 Female * Hispanic \\
& + \beta_6 \overrightarrow{Rank} + \beta_7 Female * \overrightarrow{Rank} + \beta_8 PT + \beta_9 Masters + \beta_{10} YrsSinceDegree \\
& + \beta_{11} YrsSinceDegree^2 + \beta_{12} \overrightarrow{YrsInRank} + \beta_{13} \overrightarrow{YrsInRank^2} + \beta_{14} \overrightarrow{Department} + \varepsilon
\end{aligned}
$$

An advantage of this model is ease of interpretation. Because the dependent variable is **salary**, coefficients (denoted by α and $\beta_1,\ldots,\beta_{14}$) can be directly interpreted as dollars, and therefore provide an estimate of the change in **salary** that would result from a change in the associated explanatory variable. For example, if the coefficient associated with **Female** (β_1) were -1,000, this would indicate that salaries of female professors are an estimated $1,000 less than those of male professors, *ceteris paribus*. *Model 1* imposes the assumption that certain factors affect individuals similarly, regardless of gender, race, or ethnicity; *Model 1* assumes part-time work, highest degree, years since degree, years in various ranks, and department have equivalent effects on the salaries of men, women, and minorities. However, interaction terms are used to allow impacts on salaries to vary by gender for some explanatory variables – race, ethnicity, and current rank.

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[13] This is done by multiplying the 12-month full-time-equivalent salary by 9/11 (per the UNM Faculty Handbook, section C50).

Model 2 is nearly identical to *Model 1*, but has the natural log of base salary as its dependent variable:

$$\ln(Salary) = \alpha + \beta_1 Female + \beta_2 \overrightarrow{Race} + \beta_3 Female * \overrightarrow{Race} + \beta_4 Hispanic + \beta_5 Female * Hispanic$$
$$+ \beta_6 \overrightarrow{Rank} + \beta_7 Female * \overrightarrow{Rank} + \beta_8 PT + \beta_9 Masters + \beta_{10} YrsSinceDegree$$
$$+ \beta_{11} YrsSinceDegree^2 + \beta_{12} \overrightarrow{YrsInRank} + \beta_{13} \overrightarrow{YrsInRank^2} + \beta_{14} \overrightarrow{Department} + \varepsilon$$

The advantage of *Model 2* is that the natural log of salary, **ln(salary)**, will have a more normal distribution than **salary**, which may result in a better fit. Because the natural log of **salary** is used as the dependent variable, coefficients are interpreted as the percent change in **salary** (rather than dollar change in **salary**) attributable to changes in the various explanatory variables. For example, if the coefficient for **Female** (β_1) were -0.015, this would indicate that female professors' salaries are 1.5% lower than those of male professors, *ceteris paribus*. The assumptions imposed by *Model 2* regarding whether the effect of a given variable varies with gender and/or rank are the same as those imposed by *Model 1*. Results from *Models 1* and *2* are used to estimate the average differences in salaries among various groups.

Model 3 has **salary** as its dependent variable, but differs from both *Model 1* and *2* in that it is estimated using data pertaining only non-Hispanic white male professors. As a result, the gender, race, and ethnicity variables are unnecessary and the regression equation is a modified version of *Model 1*:

$$Salary = \alpha + \beta_1 \overrightarrow{Rank} + \beta_2 PT + \beta_3 Masters + \beta_4 YrsSinceDegree + \beta_5 YrsSinceDegree^2$$
$$+ \beta_6 \overrightarrow{YrsInRank} + \beta_7 \overrightarrow{YrsInRank^2} + \beta_8 \overrightarrow{Department} + \varepsilon$$

Model 3 allows us to estimate how career attributes are rewarded for non-Hispanic white male professors. *Model 3* regression results are subsequently used to predict salaries for women and minorities under the assumption that their career attributes are rewarded in the exact same manner as are career attributes for non-Hispanic white men. Differences between women's and minorities' actual salaries and their predicted salaries are used to assess the presence of shortfalls in individual's salaries.

Explanatory Variables

This section provides details regarding how the explanatory variables are constructed and measured. Gender, race, and ethnicity dummy variables and associated interaction terms are used to capture the effects on salaries of membership in various gender and minority groups.[14] **Female** is a dummy variable that takes a value of 1 if an individual is female and a value of 0 otherwise. $\overrightarrow{Race}$ is a vector of dummy variables used to capture whether an individual self-identifies as Asian, African American, Native American, white, or of mixed race. The dummy variable **white** is selected as the reference category and is therefore omitted from the regression equation.[15] **Hispanic** is a

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[14] Dummy variables are used to denote membership in a given group. If an individual belongs to a given group, the dummy variable associated with that group takes a value of 1, and a value of 0 otherwise.

[15] The choice of which racial group is considered the reference category does not affect results obtained from the analysis. This is true for all cases in which dummy variables are used to capture group membership. As

dummy variable used to capture ethnicity; **Hispanic** takes a value of 1 if an individual self-identifies as Hispanic, and a value of 0 otherwise. A dummy variable is also used to capture cases of unknown race and ethnicity (**RaceEthUnknown**). Interaction terms between gender & race and gender & ethnicity variables are included to allow the effects of race and ethnicity to vary with gender.

$\overrightarrow{Rank}$ denotes a vector of current rank dummy variables used to capture whether as of December 31, 2014 an individual was an assistant professor (**AssistProf**), associate professor (**AssocProf**), full professor (**FullProf**), or distinguished professor (**DistProf**). Current rank variables serve as a proxy for performance. The inclusion of current rank as an explanatory variable is contentious, since current rank can serve as a proxy for performance but can also be influenced (biased) by gender, race, and ethnicity. If current rank is indeed influenced by gender, race, and ethnicity, and if current rank is included as an explanatory variable in regressions designed to assess the presence of pay disparities, then the gender, race, and ethnicity biases in salaries will be underestimated.[16] Although using actual performance variables (such as publications, grants, teaching, service, etc.) may be preferable, gathering such data and accurately & consistently quantifying the data can be unwieldy and time consuming. As an example, the value of a published book relative to the value of a published journal article would have to be coded according to how each department or discipline values these types of publications. Furthermore, the coding of a journal article would also need to reflect the prestige of the periodical in which it appeared. For this reason, most studies do not incorporate performance data, but instead use current rank as a proxy.

Full professors are the reference category, and are therefore reflected in the intercept (α). Relative to full professors, assistant and associate professors are expected to be paid less, and thus the coefficients on **AssistProf** and **AssocProf** are expected to be negative. In contrast, distinguished professors are expected to make more than full professors, and thus the coefficient on **DistProf** is expected to be positive. An interaction term between **Female** and $\overrightarrow{Rank}$ is included to capture the possibility that the effect of rank on salary may differ for men and women.

A dummy variable (**PT**) is included to capture that some professors work only part-time; PT=1 if an individual works part-time, and equals 0 otherwise. **Masters** is a dummy variable that takes the value of 1 if the terminal degree obtained by a professor is a Masters rather than a PhD, and a value of 0 otherwise. Those for whom the terminal degree is a Masters are expected to have lower salaries, and thus the coefficient on **Masters** is expected to be negative.

Two measures are used to account for the fact that experience and salary are positively correlated: years of experience prior to hire at UNM and years in each rank at UNM. Years since degree

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stated on page 71 of Haignere (2002), "When entering a group membership variable into the regression analysis, one of the dummy categories is omitted.... The selection of the particular category to be omitted from the regression analysis does not affect the analysis.... The estimate for the omitted category is represented by the intercept. For example, if the category male is omitted for gender, the category associate professor is omitted for rank, and the category social sciences is omitted for discipline, the salary at the intercept will be the estimate for the average salary of male associate professors in social sciences with zero years of service and zero years in rank. To calculate the average salary for any other group, the regression coefficient for that group is added to the intercept value."

[16] For example, consider a situation in which qualified women are denied rank promotions (and thus rank is influenced by gender). The women will appear to be overpaid for their rank, but in fact are frozen in rank. Such a situation will result in the bias in salaries being underestimated if current rank is included in the model (Haignere 2002).

(measured at time of hire and denoted by **YrsSinceDegree**) is used as a proxy for years of experience, which thereby imposes the assumption that individuals begin working in their field upon completing their terminal degree and continue to work in their field until being hired by UNM. However, this assumption may be more valid for male faculty members than for female faculty members, and thus women may be credited with more years of experience than they actually have. As a consequence, any gender bias may be overestimated.[17] Note that YrsSinceDegree will typically be positive, but can be negative when an individual completes their degree after being hired. Years since degree is expected to have a positive influence on salary, although a quadratic term (**YrsSinceDegree²**) is included to capture the fact that although additional experience is expected to increase one's salary, it is expected to increase salary at a decreasing rate. For example, an additional year of experience for someone who obtained their PhD 2 years prior to hire at UNM will have a larger positive effect on their salary than an additional year of experience for someone who finished their degree 20 years prior to hire at UNM.

The second measure of experience (years in various ranks at UNM, denoted by $\overrightarrow{YrsInRank}$) is calculated as the difference between the dates of promotion into and out of each rank. The years in rank measures are: **YrsAssistProf**, **YrsAssocProf**, **YrsFullProf**, and **YrsDistProf**. Inclusion of quadratic terms $\left(\overrightarrow{YrsInRank^2}\right)$ allows for a non-linear relationship between **salary** and years in a given rank. Finally, salaries can vary greatly by department and discipline. For example, the average salaries of English and History professors are lower than those of professors in the Engineering and Business departments. To account for these market differences we include a vector of department dummy variables $\left(\overrightarrow{Department}\right)$ in our model. The reference department chosen for the analysis is Chemical and Biological Engineering Department. Because professors in the Chemical and Biological Engineering Department are relatively well-paid, the coefficients associated with most departments are expected to be negative.

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[17] Alternative approaches also have shortcomings. Information pertaining to prior experience has not historically been collected by UNM, and would therefore need to be compiled after the fact using curricula vitae and resumes. Furthermore, any attempt to quantify prior experience can be plagued by issues pertaining to race and gender. Consider a hypothetical example:

> A man who was an administrative assistant in the business world, for example, may have his experience counted as relevant for a faculty position in the business department, yet a woman who gained similar work experience but had a traditionally female title, such as office manager, may have her experience discounted as "only clerical." (Haignere 2002, p.33)

The process of compiling prior experience data after the fact is therefore time consuming and would likely yield inaccurate results. For these reasons we use years since highest degree at time of hire as a proxy for prior experience.

Addendum Four - Factors That Influence UNM Main Campus Base Salary Compensation

Currently, Main campus considers these factors in setting compensation rates for continuing faculty. These factors will be reviewed by the Senior Vice Provost with the assistance of a faculty advisory committee in AY2016/17 for possible refinement.

Merit

Per *Faculty Handbook* policy, UNM presumes that all base salary increases will be made on the basis of meritorious performance. "Merit, as determined in annual salary reviews, shall be the primary criterion for raises." An annual written performance review is required for all continuing faculty and must serve as the basis for any merit increase. FHB B4.9.6.

Promotion in Rank

Advancement in rank offers opportunities for promotional compensation increases. Currently, new revenue for promotional increases is allocated by the Office of Academic Affairs for Main campus faculty who advance through the ranks within the professorial titles (associate professor $4,000; professor $5,000; distinguished professor $5,000), and the two ranks within the lecturer titles (senior lecturer $3,000; principal lecturer $4,000). Academic units must self-fund additional increases associated with advancement or promotion and should have written policies for doing so.

Endowed Professorships and Chairs and Awards for Special Distinction

Faculty may receive various special recognition awards which are permanently retained and added to the base contract salary, e.g., the Presidential Teaching Fellow.

Across the Board Increases

Although rare in the current economic climate, from time to time the University and/or the State may provide new recurring revenue to award across-the-board increases of an equal percentage or amount to all employees regardless of performance, to continuing base salaries.

Market Demand for Various Disciplines

National surveys of faculty compensation demonstrate that different disciplines command different salaries, e.g., professional schools, natural sciences and engineering currently command higher salaries than do the arts, humanities, social sciences and education.

Credentials

Credentials set the minimum requirements for various faculty positions. To hold a continuing appointment, UNM's faculty must hold the highest degree attainable in the field, i.e., a 'terminal degree,' as a minimum requirement.   Knowledge, skills and prior experience are also a factor at setting a base salary at the time of initial hire.

Compression and Inversion by Rank

When new revenue for across the board/cost of living increases is not forthcoming, a 'Loyalty Tax' often results as salaries of long-serving, existing faculty may not keep pace with market rates. Employment longevity can result in salary compression and inversion by rank. For example, a faculty member hired as a Professor in 2008 most likely started at a lower base salary than a Professor in the same field who started in 2012. Four years of flat or rescinded State appropriations during the Great Recession exacerbated salary compression and inversion problems, particularly during this time period.   In AY2012 Main campus faculty whose base salaries were significantly below the mean for their department based on rank and years of service received compensation adjustments funded by the Office of Academic Affairs in an attempt to address these problems.

Retention Counter Offers

Competition with peer institutions, particularly in the senior faculty ranks, often leads to faculty being recruited by other institutions. In some cases, to protect UNM's interest in retaining its most productive faculty, and to retain prominent scholars with national and international reputations, a retention salary increase may be negotiated with prior approval of the Provost. The decision to extend a counteroffer must include an assessment on its potential for creating additional equity or loyalty tax concerns, and decisions must be carefully weighed and justified in view of such concerns.

Ensuring Comparable Pay for Comparable Work (Equity)

UNM has worked for several years to ensure that it is meeting its commitment to the principle of comparable pay for comparable work for all of its employees, including women and under-represented groups.   These efforts have included periodical allocation of new recurring revenue specifically to help address any unexplained shortfalls from expected salaries for similarly situated faculty.

Addendum Five – Simpson's Paradox, or the Tyranny of Averages

The most informative methods for analyzing pay data, disaggregate the data and account for nondiscriminatory factors such as market rates for different fields of study, years since terminal degree achieved, achievements in rank, etc., as UNM has done in the two studies reported above.

However, less informative compensation analyses often resort to use of averages in an attempt to illustrate salary parity. Statistical theory demonstrates that using averages to compare different groups is notoriously unreliable. Doing so often results in what is known as **"Simpson's paradox," whereby trends in certain groups of data disappear or reverse when those data are combined and averaged.**[18] A brief article by Dr. Jordan Ellenberg, professor of mathematics at the University of Wisconsin-Madison, regarding the problems associated with incomplete statistical analyses may provide further context.[19]

An example of Simpson's paradox occurred at the University of California, Berkley when the University was sued for gender bias in graduate admissions. In that case, the initial results of the statistical analysis of male versus female graduate admissions showed that, when the total data was aggregated and averaged, males appeared to have been admitted at a rate so much greater than females that it appeared that discriminatory factors must have played a role in admittance determinations. However, when the data was disaggregated and nondiscriminatory factors were accounted for, the data actually showed no such factors, and in fact showed that, in some circumstances, females were admitted at a greater rate than males.[20]

Historically, males attended and graduated universities with advanced degrees at a greater rate than females. This trend is reversing.[21] However, this reversal is relatively recent. Thus, UNM, like most universities, has a legacy population whereby its longest-tenured faculty – and therefore its Full Professors – are majority male. UNM therefore has a "headcount" disparity that, as the aforementioned trend reverses, will self-correct.

Similar to the Berkeley case, UNM's "headcount" disparity results in what appears to be a statistical pay disparity. This appearance, as in the Berkeley case, is misleading. As the two scenarios below illustrate, even in cases where absolute pay parity is achieved across rank, if there is a headcount disparity, what appears to be a statistical pay disparity will occur. In fact, as the second scenario in Example 2 illustrates, even if females are paid at a higher rate than males, if there are fewer females than males in the sample size, averaging the salaries will still result in what appears to be a statistical pay disparity.

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[18] https://en.wikipedia.org/wiki/Simpson%27s_paradox.

[19] http://www.wsj.com/articles/how-not-to-be-misled-by-data-1435258933.

[20] http://www.sciencemag.org/content/187/4175/398.abstract.

[21] http://www.pewresearch.org/fact-tank/2014/03/06/womens-college-enrollment-gains-leave-men-behind/

Simpson's Paradox Example One: Assumes all staff at a given rank are paid the same regardless of gender; same number of males and females at each rank except Professor where there is a 2.6: 1 ratio, male to female. Headcount imbalance at the Professor rank results in weighted average paid to women being 14.4% less than men.

Gender and Academic Rank	Total staff	Total number of months	Salary outlays	Weighted average monthly salaries	Percentage of men's salary at same rank
Example One					
Men					
Professors	26	260	$2,600,000	$10,000	
Associate Professors	10	100	$800,000	$8,000	
Assistant Professors	10	100	$600,000	$6,000	
Instructors	10	100	$150,000	$1,500	
Lecturers	10	100	$400,000	$4,000	
Total men	66	660	$4,550,000	$6,894	
Women					
Professors	10	100	$1,000,000	$10,000	100.00%
Associate Professors	10	100	$800,000	$8,000	100.00%
Assistant Professors	10	100	$600,000	$6,000	100.00%
Instructors	10	100	$150,000	$1,500	100.00%
Lecturers	10	100	$400,000	$4,000	100.00%
Total women	50	500	$2,950,000	$5,900	85.58%

Simpson's Paradox Example Two: Assumes same number of males and females at each rank except Professor where there is a 2.6: 1 ratio, male to female; but here all women are paid *more than* the men at every rank; the Tyranny of Averages results in the weighted average paid to women being less than the weighted average being paid to men.

Gender and Academic Rank	Total staff	Total number of months	Salary outlays	Weighted average monthly salaries	Percentage of men's salary at same rank
Example Two					
Men					
Professors	26	260	$2,600,000	$10,000	
Associate Professors	10	100	$800,000	$8,000	
Assistant Professors	10	100	$600,000	$6,000	
Instructors	10	100	$150,000	$1,500	
Lecturers	10	100	$400,000	$4,000	
Total men	66	660	$4,550,000	$6,894	
Women					
Professors	10	100	$1,250,000	$12,500	125.00%
Associate Professors	10	100	$850,000	$8,500	106.25%
Assistant Professors	10	100	$625,000	$6,250	104.17%
Instructors	10	100	$155,000	$1,550	103.33%
Lecturers	10	100	$402,500	$4,025	100.63%
Total women	50	500	$3,282,500	$6,565	95.23%