



The University of Arizona

Faculty Retention/Loss Report 2004

University of Arizona Faculty Retention/Loss Report, FY 2004

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Findings of the Report

This is the seventh consecutive report surveying faculty retention and losses at the University of Arizona. The data and anecdotes contained in the report help to frame our discussions on faculty salaries and other resources with ABOR and the Legislature, and help us track competitiveness with our peers. Additionally, the anecdotal information in the report provides information that may influence decisions related to non-salary resources and campus climate.

This year's report (Figure 1) shows a significant decrease in the number of faculty lost to other institutions from last year. The retention rates have rebounded with 61% of the faculty receiving outside competitive offers choosing to stay in Arizona. Continued aggressive retention efforts on the part of colleges and the central administration have prevented the losses from being much greater. On average, deans negotiated retention offers with 6% of their tenure and continuing track faculty and professionals, down from last year's 8%.

Figure 1. Retention trends, FY 1999 - 2004

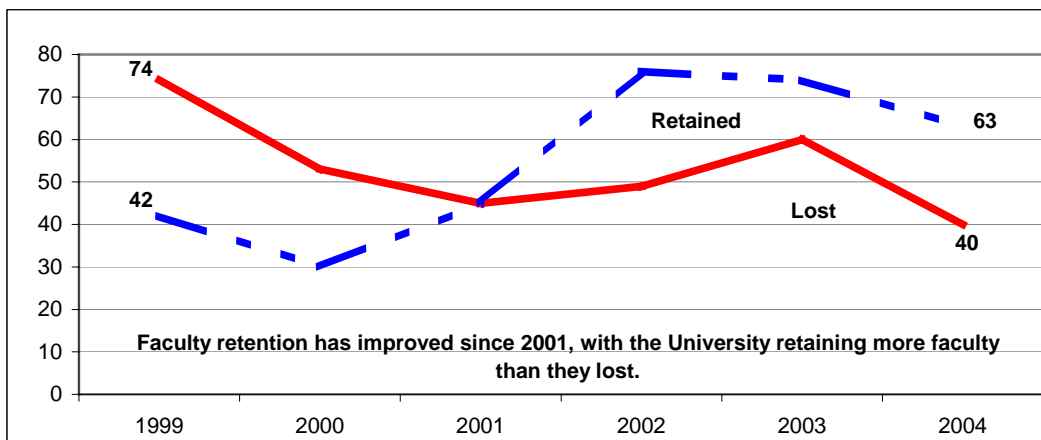
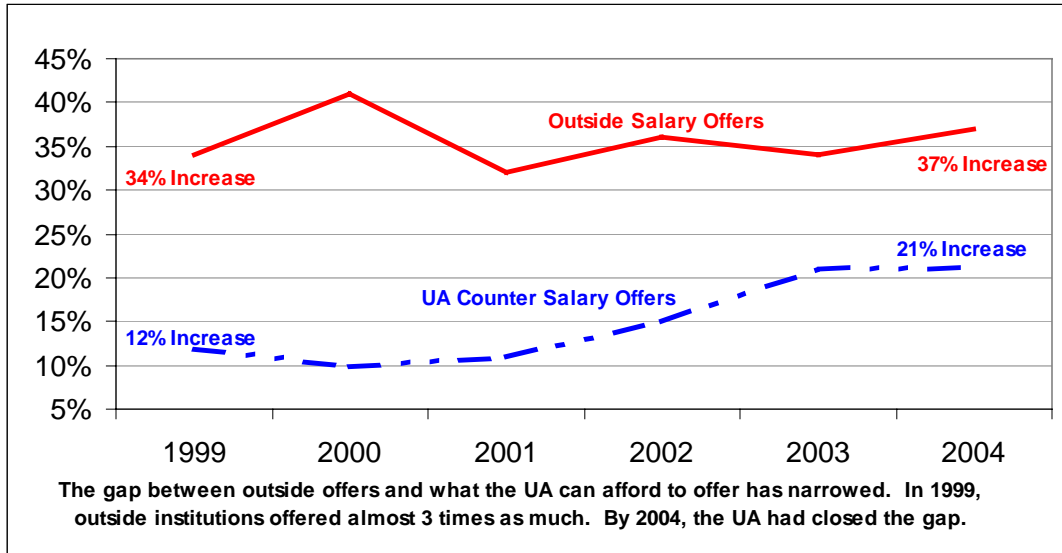


Figure 2's two lines compare the average percentage salary increases from outside offers to the average percentage salary increases from UA counter offers over time. As shown, the UA is not always able to match the level of outside salary offers, but the gap is narrowing. In 1999 there was a 22-point spread between outside and University counter

salary offers. In 2004, that gap was reduced to a 16-point difference. But, there is a lot more to faculty retention than just salary.

Figure 2. Comparison of outside and UA counter salary offers, FY 1999 – 2004



Outside institutions and agencies are offering faculty other perks beside higher salaries. The survey comments indicated that faculty not only sought higher salaries and advancement opportunities, but also were looking for favorable campus climates, ways to accommodate dual-career families, and adequate resources to facilitate quality research.

Favorable Diverse Retention Trends Continue

There has been steady improvement in the UA’s ability to retain faculty from underrepresented groups. Table 1 presents retention trends for select years by gender and minority status.

Table 1. Retention Trends by Gender and Minority Status – Select Years

Faculty Retained	Number				
	1999	2001	2003	2004	FY 1999- 2004
Women	11	14	32	22	116
Men	31	31	42	41	214
Minority	8	5	12	9	52
Other	34	40	62	54	278
Total Retained	42	45	74	63	330
Total Survey Cases	116	90	134	103	651
	Percentage				
	1999	2001	2003	2004	FY 1999- 2004
Women	28%	48%	58%	63%	49%
Men	41%	51%	53%	60%	52%
Minority	38%	42%	48%	53%	46%
Other	36%	51%	57%	63%	52%
Total Retained	36%	50%	55%	61%	51%

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In 2004, retention rates for women faculty were 63% compared to 28% in 1999. Retention rates for minority faculty were 53% in 2004 compared to 38% in 1999. Figures 3 and 4 illustrate those trends. On average though over the past 6 years, the difference between women and men's retention/loss rates and the difference between minority and other's retention/loss rates were not statistically significant.¹

Figure 3. Faculty retention trends, women and men, FY 1999 – 2004

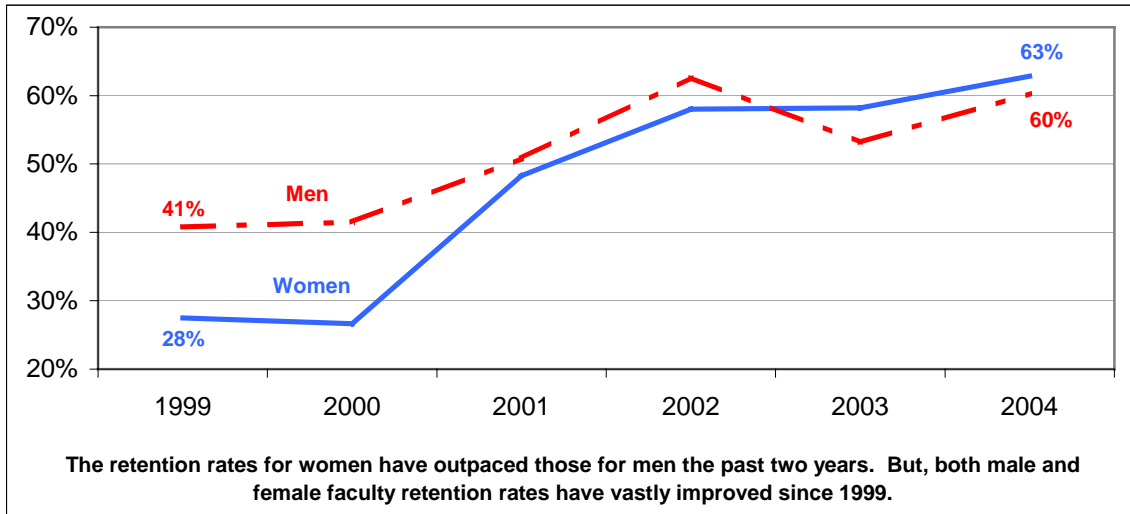
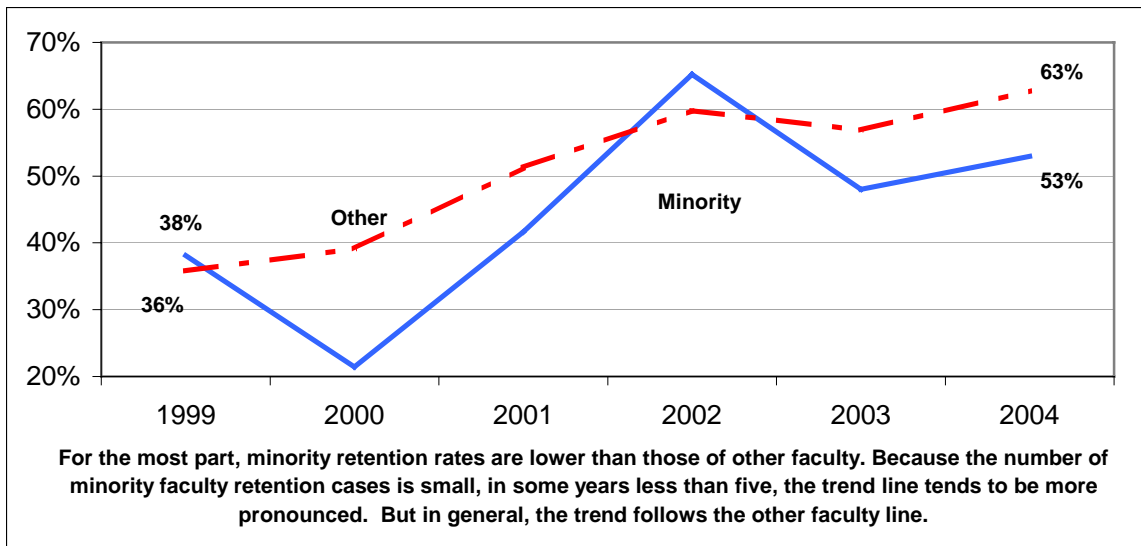


Figure 4. Faculty retention trends, minority and non-minority faculty, FY 1999 - 2004



¹ Based on Chi-Square Test Results at .05 Levels.

Parable of the Broken Window

Frederic Bastiat coined the Broken Window analogy in his 1850 essay *That Which is Seen and That Which is Not Seen* to illustrate the concept of hidden costs, more formally referred to by economists as opportunity costs. The parable relates how a town began deluding themselves into thinking that their economic prosperity increased because a shopkeeper's window was broken.

“The shopkeeper had to buy a window, benefiting the glazier, the glazier bought bread benefiting the baker, the baker bought shoes, benefiting the shoemaker, etc.”² The town believed that they were all better off because the window was broken. What the town considered was the benefits of “having” to purchase a new window. What they forgot to consider were the hidden costs to the shopkeeper and others. The shopkeeper now has an unbroken window – which he had before. If the window was not broken, he would have had a window plus he would have gone out to buy bread from the baker, etc. Hence, the hidden cost. The shopkeeper had to use his resources to fix the window rather than spending it on something else.

What does this have to do with faculty retention? The central administration and deans have been making great strides retaining our world-class faculty during lean economic times. But, our internal reallocation efforts come at a cost. Based on the past 5 years of survey data (FY 1999-2003), the University reallocated approximately \$3.1 million³ of its own funds towards faculty salaries for retention. This amount did not include additional resources for support staff, graduate assistantships, and other research and teaching related costs. In addition, last January, the University reallocated \$5.4 million² (state fund only estimates) for merit/market salary adjustments. This is akin to the shopkeeper fixing the broken window – hence the University's hidden costs. The reallocations come at the expense of unfilled faculty and staff positions, deferred maintenance, and other focused excellence initiatives.

This is not to say that the money was not well spent. This year the University retained faculty who generated \$43 million in sponsored research over the last 3 years while those we lost generated \$14 million. In particular, our internal reallocations resulted in retaining 10 stellar tenure/continuing track faculty who each earned in excess of \$1 million in research. And these figures do not include the totals from the College of Medicine. Medicine was able to retain a key cancer researcher and a clinical faculty member in Pediatrics who together earned almost \$4 million in grants over the past 3 years.

This year though, Arizona state leadership found an extra \$4.3 million² to help the University with much-need resources for our faculty retention efforts. These funds will go a long way in helping colleges begin to recover from many years of aggressive outside recruitment efforts to preserve a quality and dedicated faculty for Arizona's future.

² Wikipedia, the Free Encyclopedia. “Parable of the Broken Window”, http://en.wikipedia.org/wiki/parable_of_the_broken_window

³ All salary packages include 15% marginal ERE.

Conclusions

It is normal for a number of people to leave the University each year, to follow their own career paths elsewhere. This was borne out in the anecdotal evidence with several faculty being offered directorships and deanships. However, we must assess the UA's competitive health beyond "normal" attrition. Successful retentions are, in effect, one form of reallocation. In times of severe financial stress, we must make thoughtful decisions about which faculty to retain, since retention dollars will also strengthen certain programs. As we target certain faculty for assertive retention, we refocus resources and emphases and often create new problems that must then be addressed.

The global, knowledge-based economy has placed financial strains on all public universities nationwide, not just the UA. With escalating interest in new technologies, human capital has become a valuable asset to research-oriented institutions. University of Arizona faculty are being offered labs, equipment, graduate students and related resources to advance their careers outside of Arizona. A more recent trend is that the offers are also coming from outside of the United States including Australia, Canada, and Europe.

The stated commitment of the institution to improving its record in the area of diversity must continue to play out in the retention process. The units, colleges, and administration have aggressively sought to retain faculty from underrepresented groups, a trend that must continue.

More recently, State leadership found much needed funds during lean times to assist the UA in its efforts to retain faculty. While the dollars do not make up for previous years aggressive assaults from the outside, the resources will go a long way in reaffirming that a University's strength is in its faculty and the State's economic prosperity is directly tied to that strength by providing quality higher education to its citizens.

Appendix I:

Survey Summary – FY 2004

How many retention cases were there at the UA?

<i>Number</i>	<i>Total</i>	<i>Faculty Recruited Away</i>	<i>Faculty Retained (Includes Pending)</i>
<i>Tenure/Continuing Track</i>	<i>103</i>	<i>40</i>	<i>63</i>
Clinical Medicine Departments	6	4	2
Deans and Year-to-Year	<u>14</u>	<u>9</u>	<u>5</u>
Survey Total	123	53	70
<i>Percentage</i>			
<i>Tenure/Continuing Track</i>	<i>100%</i>	<i>39%</i>	<i>61%</i>
Clinical Medicine Departments	100%	67%	33%
Deans and Year-to-Year	100%	64%	36%
Survey Total	100%	43%	57%

Which colleges had retention cases?

- Every college except UA South negotiated retention cases for their tenure/continuing track faculty during FY 2004. In addition, the College of Pharmacy lost three clinical faculty members this past year. It is very difficult for this college to compete with pharmacist salaries in the private market.
- The colleges of Engineering, Social and Behavioral Sciences, and Eller College of Management were being heavily recruited from the outside this past year with each losing five or more faculty.

Where did our faculty go?

The University of Arizona lost faculty to top tier public and private universities, as well as to the private sector, including:

- State universities such as Arizona State, Colorado, Florida/Gainesville and Tampa, Iowa, Massachusetts, New Mexico, Ohio State, Rutgers, Texas/Arlington, and Dallas.
- California institutions including UC Fullerton, UC Merced, UC Riverside, UC Santa Barbara, and the Public Policy Institute of California.
- Private institutions including Bradley, Duke, Emory, Georgetown, George Washington, University of the Pacific, Vanderbilt, and Washington University.
- International institutions including Lulea University in Sweden, Melbourne University in Australia, University of Alberta in Canada, and the University of Lancaster in the United Kingdom.
- Other organizations, including H. Lee Moffitt Cancer Center in Florida, the Institute of Museum and Library Services, private practice and other industries.

Appendix II:

Anecdotal Information – FY 2004

Faculty leave for many reasons, both personal and professional. While the University cannot offer solutions to all faculty concerns, there are several recurring themes that the University may need to revisit. Based on the comments provided in the survey, faculty are concerned about advancement opportunities, diversity, the accommodation of dual careers, and research support.

Advancement Opportunities:

Three faculty members from Agriculture and Life Sciences were being recruited - two for deans' positions and one for department head. The UA was successful in retaining all three. One was a Regents Professor and member of the National Academy of Science recruited for a dean's position at the University of Texas-Austin. The College of Engineering was not as fortunate, losing two faculty members to chair positions at Rutgers and the University of Massachusetts. The College of Social and Behavioral Sciences lost a department head to Duke and retained a faculty member offered a deanship at William and Mary.

Diversity:

On the diversity front, the College of Law has a nationally recognized Indigenous People's Law and Policy (IPLP) program. But quality costs. As such, University faculty affiliated with IPLP are continually recruited. The Eller College of Management suffered two diversity losses but was able to retain two other minority faculty members.

Dual Careers:

One faculty member's household held dual careers in Tucson and Phoenix, but now they are both in Phoenix. In another situation, the loss of an outstanding researcher and mentor in our pathobiology program was due to an outstanding offer to be part of the new Space Agriculture and Biotechnology Institute affiliated with NASA. The deal closed when the spouse was also offered a position. A third instance, a law professor known for her work in international and indigenous peoples law left for George Washington to be with her fiancée. The University of Arizona was unsuccessful in recruiting the fiancée to Tucson. The College of Engineering, on the other hand, offered a position to a faculty member's spouse resulting in a successful retention.

Appendix II - continued

Research:

The College of Education lost a prominent researcher in child development to the University of Texas who offered laboratory and center space, 20% of the indirect cost recovery, and a startup package of \$35,000. That college lost another faculty member who specialized in the area of indigenous languages to Arizona State University. ASU was able to offer an endowed chair with an additional \$15,000 in compensation, and research startup and support.

To counter an aggressive offer from the Colorado School of Mines, Engineering offered \$25,000 for equipment and agreed to cover 100% of the entire salary during a full year sabbatical to one of its distinguished scholars and researchers. Engineering was successful in retaining that faculty member but not successful in another two instances. The large microelectronics research group at ASU successfully recruited two of UA's Engineering faculty this past year.

In Fine Arts, ASU successfully recruited a faculty member by offering him \$10,000 in research startup and no classroom teaching his first year. In another instance Monmouth University offered \$5,000 in research startup but was unsuccessful in recruiting that Fine Arts faculty member. The University of Alberta in Canada successfully recruited a UA faculty member from Humanities offering a higher salary and a better research environment.

The College of Medicine lost two leading cancer researchers to H. Lee Moffitt Cancer Center in Tampa, Florida. Florida offered career advancement, higher salary, more laboratory space and dedicated time for research. The College of Science lost its entire research team in wireless/mobile technology to overseas. We indeed are in a global, human capital economy. Science was successful in averting a faculty loss to the University of Southern California by offering \$50,000 in equipment upgrades, and funds for a technical and two support staff positions.

Washington University offered political science's most productive researcher \$10,000 in start up and \$20,000 in research annually for the next 5 years. Washington University was not alone. Several institutions including Notre Dame, the Australian National University, Vanderbilt, Brown University and Penn State offered faculty summer salaries, \$5,000 to \$10,000 annually for research, travel money, graduate assistantships, and larger laboratory space to many of the UA's Social and Behavioral Sciences faculty. To avert several aggressive offers from these institutions, Social and Behavioral Sciences offered salary increases, research funds, graduate assistant positions and library acquisitions.

Appendix III:

Salary increases offered to the UA faculty– FY 2004^{4, 5}

		<i>Outside Offer Compared to Faculty's Prior Salary</i>				
		<i>N</i>	<i>Prior UA Salary</i>	<i>Outside Salary Offer</i>	<i>Dollar Difference</i>	<i>Percent Salary Increase</i>
For those cases where there was information on outside offers, agencies and institutions offered on average 37% more in salary trying to recruit UA faculty.	Faculty Recruited Away	29	\$81,892	\$120,737	\$39,000	47%
	Faculty Retained (includes pending)	28	\$86,416	\$109,187	\$23,000	26%
	Known Cases Total	57	\$84,114	\$115,063	\$31,000	37%
	Unknown Outside Salary	46	--	--	--	--
	Total	103	--	--	--	--

		<i>UA Counter Offer Compared to Faculty's Prior Salary</i>				
		<i>N</i>	<i>Prior UA Salary</i>	<i>UA Counter Offer</i>	<i>Dollar Difference</i>	<i>Percent Salary Increase</i>
For those cases where there was information on UA counter offers, the UA offered on average 21% more in salary trying to retain faculty.	Faculty Recruited Away	14	\$76,929	\$99,542	\$23,000	29%
	Faculty Retained (includes pending)	59	\$83,148	\$98,884	\$16,000	19%
	Known Cases Total	73	\$81,955	\$99,010	\$17,000	21%
	Unknown Outside Salary	30	--	--	--	--
	Total	103	--	--	--	--

		<i>Outside and UA Counter Offer Compared to Faculty's Prior Salary</i>						
		<i>N</i>	<i>Prior UA Salary</i>	<i>Outside Salary Offer</i>	<i>UA Counter Offer</i>	<i>Percent Salary Increase Outside Offers</i>	<i>Percent Salary Increase of UA Counter Offers</i>	<i>Outside Salary Offers are What Percent Higher than UA Counter Offers</i>
In those cases where there was information on both outside offers and UA counter offers, the overall percent salary increase between the two offers remained stable over last year.	Faculty Recruited Away	12	\$78,860	\$112,697	\$102,315	43%	30%	10%
	Faculty Retained (includes pending)	28	\$86,416	\$109,187	\$103,950	26%	20%	5%
	Known Cases Total	40	\$84,149	\$110,240	\$103,459	31%	23%	7%
	Unknown Outside or Counter Salary Offers	63	--	--	--	--	--	--
	Total	103	--	--	--	--	--	--

⁴ All salaries are academic equivalent.

⁵ Figures include tenure/continuing track faculty and professionals in all departments except those in clinical medicine. Clinical medicine faculty were excluded from the salary offer comparisons because their income proportions are very different from non-clinical faculty. Clinical faculty have additional income from patient services and the outside salary offers reported are often from private-practice providers.

Appendix IV

Retention by College⁶ - FY 2004

<i>Colleges</i>	<i>Total Retention Cases</i>		<i>Recruited Away</i>		<i>Retained (Includes Pending)</i>		<i>College</i>	
	<i>N</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>Total</i>	<i>Percentage of Cases</i>	
Agriculture & Life Sciences	11	4	36%	7	64%	248	4%	
Architecture & Landscape Architecture	4			4	100%	22	18%	
Education	3	3	100%			61	5%	
Eller College of Management	8	5	63%	3	38%	81	10%	
Engineering	9	6	67%	3	33%	127	7%	
Fine Arts	4	2	50%	2	50%	119	3%	
Humanities	1	1	100%			133	1%	
Nursing	1			1	100%	23	4%	
Pharmacy	3			3	100%	32	9%	
Public Health	2	1	50%	1	50%	7	29%	
Rogers College of Law	8	1	13%	7	88%	35	23%	
Science	13	3	23%	10	77%	275	5%	
Social & Behavioral Sciences	26	7	27%	19	73%	231	11%	
UA South	0					15	0%	
University Libraries	3	3	100%			53	6%	
Medicine (Basic Science & Administration)	6	3	50%	3	50%	67	9%	
Non College Units								
Provost	0					42	0%	
Research & Graduate Studies	1	1	100%			48	2%	
Administrative Units	0					1	0%	
Total	103	40	39%	63	61%	1,620	6%	

⁶ Figures include tenure/continuing track faculty and professionals in all departments except those in clinical medicine.

Appendix V

Level of Experience Differences between Targeted Faculty and the Faculty at Large⁷

In 2004, targeted faculty were 5 years younger but had only 3 years less experience than the faculty at large. While not statistically different, last year targeted faculty had 4 years less experience than the faculty population. Increased global competition for faculty may be slowing the trend of mainly targeting junior faculty. Over the past 6 years, the University has been the most successful retaining its full professors (51% retention rate) and the least successful retaining associate professors (25% retention rate) and assistant professors (24% retention rate). It may be prudent to keep an eye on changing trends.

FY 2004 Age and Experience differences between targeted faculty and faculty at large

	<i>Older/Younger</i>	<i>By Number of Years</i>	<i>More/Less Experience</i>	<i>By Number Years at UA</i>
All Ranks	Younger	5 yrs	Less	3 years
Professor	Younger	5 yrs	Less	4 years
Associate Professor	Younger	5 yrs	Less	3 years
Assistant Professor	Younger	2 yrs	Same	

Age difference between targeted faculty and the faculty at large

Age <i>(Survey Cases minus All Faculty)</i>	<i>FY 1999</i>	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>6-Year Avg</i>
All Ranks	- 4.5	- 6.6	- 7.1	- 4.6	-4.7	-5.2	-5.2
Professor	- 3.4	- 6.1	- 8.1	- 4.5	-4.2	-4.8	-5.1
Associate Professor	- 4.1	- 3.3	- 3.0	- 4.8	-5.8	-5.4	-4.0
Assistant Professor	Same	- 2.5	- 2.5	Same	Same	-2.3	-0.9

Years of Experience difference between targeted faculty and faculty at large

<i>Years at UA</i> <i>(Survey Cases minus All Faculty)</i>	<i>FY 1999</i>	<i>FY 2000</i>	<i>FY 2001</i>	<i>FY 2002</i>	<i>FY 2003</i>	<i>FY 2004</i>	<i>6-Year Avg</i>
All Ranks	-4.3	-4.4	-5.5	-3.8	-4.3	-2.9	-4.0
Professor	-4.1	-4.0	-6.2	-4.2	-4.4	-4.3	-4.2
Associate Professor	-5.0	-4.1	-3.4	-3.8	-4.2	-3.1	-4.2
Assistant Professor	Same	Same	Same	+1.3	Same	Same	+0.4

⁷ Method: An analysis was conducted comparing the ages and years of experience between tenure-track faculty in the survey and the population of all University of Arizona tenure-track faculty. A t-test was conducted at each rank and for all ranks combined to determine if the differences in ages and years of experience between the sample and the population were statistically significant.