



## Institutional Research

**DATE:** February 7, 2017  
**TO:** H. Wheeler  
**FROM:** A. Andreu  
**RE:** Demographic Information of Fall 2016 WF<sup>1</sup>

In order to look for some kind of pattern the following approach was used:

Suppose the proportion, at census, of race X is n% and the percent of race X with WF is m%.

If n% versus m% are very close (no statistical difference), then the distribution matches expectation. But, if the two percents are different, then the distribution is not what was expected and further consideration may be warranted.

The results show that there are statistical differences in the proportion of Black/African American (BAA) that are faculty withdrawn versus the proportion existing in the population in fall 2016 census. That is, a greater proportion of BAAs are WF than the proportion of BAA in the population. While the proportion of Whites that are WF is less than the proportion of White in the population. There were no statistical differences with Hispanics of any race. The other races had too few counts to apply a proportion's test.

The following pages show the breakout by age, race/ethnicity, and sex. Only the statistical tests that were significant<sup>2</sup> are shown and their Cohen effect size.

Interpreting the output:

A: Fall 2016 – WF

B: Fall 2016 Census (Population)

B provides the population proportion and A gives the percent that received a WF

Effect Size			
A vs. B Female	A vs. B Male	A vs. B Female	A vs. B Male
7.62	5.97	0.34	0.26
Sig.	Sig.		

The 7.62 (or 5.97) is the z-statistic (units of standard deviation). If it is greater than (or less than) the threshold 2.576 or (-2.576), it is statistically significant.

The effect size measures the size of the difference: 0.2 is considered small, 0.5 – medium and 0.8 – large. An effect size that is at least 0.2 is considered meaningful and worth consideration.

<sup>1</sup> When citing this report, please cite as:

Andreu, A. (February 2017), *Demographic Information of Fall 2016 WF*, IR, Total pp 6

<sup>2</sup> Bonferroni correction was applied due to the multiple testing within categories p-value = 0.005

Table 1

		Fall 2016 - WF (A)				Fall 2016 Census (B)			WF Registered in Spring 2017			Effect Size			
Age			Sex		Total	Sex		Total	Sex		Total	A vs. B	A vs. B	A vs. B	A vs. B
Group	Race/Ethnicity		Female	Male		Female	Male		Female	Male		Female	Male		
Total	Asian	N	16	22	38	274	299	573	8	10	18				
		%	2.7%	3.3%	3.0%	3.8%	4.7%	4.2%	3.1%	3.6%	3.4%				
	Black/African American	N	225	176	401	1595	1022	2617	93	61	154	7.62	5.97	0.34	0.26
		%	37.7%	26.7%	31.9%	22.1%	16.0%	19.3%	36.5%	22.1%	29.0%	Sig.	Sig.		
	Hispanic, Any Race	N	76	64	140	734	491	1225	32	23	55				
		%	12.7%	9.7%	11.1%	10.2%	7.7%	9.0%	12.5%	8.3%	10.4%				
	American Indian/Alaskan Native	N	8	4	12	33	38	71	4	2	6				
		%	1.3%	.6%	1.0%	.5%	.6%	.5%	1.6%	.7%	1.1%				
	Two or More Races	N	36	37	73	287	211	498	20	22	42				
		%	6.0%	5.6%	5.8%	4.0%	3.3%	3.7%	7.8%	8.0%	7.9%				
	Non-Resident Alien	N	7	7	14	81	81	162	6	4	10				
		%	1.2%	1.1%	1.1%	1.1%	1.3%	1.2%	2.4%	1.4%	1.9%				
	Pacific Islander/Hawaiian Native	N	1	1	2	12	9	21	1	0	1				
		%	.2%	.2%	.2%	.2%	.1%	.2%	.4%	0.0%	.2%				
	Unknown	N	2	4	6	29	68	97	0	1	1				
		%	.3%	.6%	.5%	.4%	1.1%	.7%	0.0%	.4%	.2%				
	White	N	226	345	571	4167	4156	8323	91	153	244	-9.63	-6.35	0.40	0.26
		%	37.9%	52.3%	45.4%	57.8%	65.2%	61.3%	35.7%	55.4%	46.0%	Sig.	Sig.		
	Total	N	597	660	1257	7212	6375	13587	255	276	531				
		%	100%	100%	100%	100%	100%	100%	100%	100%	100%				

Table 2

		Fall 2016 - WF (A)				Fall 2016 Census (B)			WF Registered in Spring 2017			Effect Size			
Age			Sex		Total	Sex		Total	Sex		Total	A vs. B	A vs. B	A vs. B	A vs. B
Group	Race/Ethnicity		Female	Male		Female	Male		Female	Male		Female	Male		
< 20	Asian	N	4	8	12	76	105	181	2	5	7				
		%	1.8%	2.5%	2.2%	3.2%	4.3%	3.7%	1.8%	3.2%	2.6%				
	Black/African American	N	75	76	151	409	349	758	36	34	70	4.99	3.93	0.38	0.25
		%	33.3%	24.1%	28.0%	17.2%	14.3%	15.7%	32.7%	21.7%	26.2%	Sig.	Sig.		
	Hispanic, Any Race	N	37	29	66	284	206	490	17	14	31				
		%	16.4%	9.2%	12.2%	11.9%	8.4%	10.1%	15.5%	8.9%	11.6%				
	American Indian/Alaskan Native	N	4	1	5	13	15	28	2	1	3				
		%	1.8%	.3%	.9%	.5%	.6%	.6%	1.8%	.6%	1.1%				
	Two or More Races	N	19	21	40	123	97	220	11	17	28				
		%	8.4%	6.7%	7.4%	5.2%	4.0%	4.6%	10.0%	10.8%	10.5%				
	Non-Resident Alien	N	3	1	4	22	21	43	3	1	4				
		%	1.3%	.3%	.7%	.9%	.9%	.9%	2.7%	.6%	1.5%				
	Pacific Islander/Hawaiian Native	N	1	1	2	4	5	9	1	0	1				
		%	.4%	.3%	.4%	.2%	.2%	.2%	.9%	0.0%	.4%				
	Unknown	N	0	1	1	15	24	39	0	1	1				
		%	0.0%	.3%	.2%	.6%	1.0%	.8%	0.0%	.6%	.4%				
	White	N	82	177	259	1433	1627	3060	38	84	122	-7.08	-3.47	0.48	0.21
		%	36.4%	56.2%	48.0%	60.2%	66.4%	63.4%	34.5%	53.5%	45.7%	Sig.	Sig.		
	Total	N	225	315	540	2379	2449	4828	110	157	267				
		%	100%	100%	100%	100%	100%	100%	100%	100%	100%				

Table 3

		Fall 2016 - WF (A)				Fall 2016 Census (B)			WF Registered in Spring 2017			Effect Size			
Age			Sex		Total	Sex		Total	Sex		Total	A vs. B	A vs. B	A vs. B	A vs. B
Group	Race/Ethnicity		Female	Male		Female	Male		Female	Male		Female	Male	Female	Male
20 - 24	Asian	N	9	12	21	106	118	224	5	5	10				
		%	4.5%	5.5%	5.0%	4.6%	5.6%	5.1%	6.2%	5.9%	6.0%				
	Black/African American	N	76	54	130	470	309	779	31	17	48	4.90	3.41	0.38	0.26
		%	37.6%	24.9%	31.0%	20.4%	14.5%	17.6%	38.3%	20.0%	28.9%	Sig.	Sig.		
	Hispanic, Any Race	N	20	25	45	228	170	398	5	6	11				
		%	9.9%	11.5%	10.7%	9.9%	8.0%	9.0%	6.2%	7.1%	6.6%				
	American Indian/Alaskan Native	N	2	3	5	6	9	15	1	1	2				
		%	1.0%	1.4%	1.2%	.3%	.4%	.3%	1.2%	1.2%	1.2%				
	Two or More Races	N	10	9	19	105	61	166	6	2	8				
		%	5.0%	4.1%	4.5%	4.6%	2.9%	3.8%	7.4%	2.4%	4.8%				
	Non-Resident Alien	N	4	5	9	35	46	81	3	3	6				
		%	2.0%	2.3%	2.1%	1.5%	2.2%	1.8%	3.7%	3.5%	3.6%				
	Pacific Islander/Hawaiian Native	N	0	0	0	4	3	7	0	0	0				
		%	0.0%	0.0%	0.0%	.2%	.1%	.2%	0.0%	0.0%	0.0%				
	Unknown	N	1	1	2	6	9	15	0	0	0				
		%	.5%	.5%	.5%	.3%	.4%	.3%	0.0%	0.0%	0.0%				
	White	N	80	108	188	1340	1399	2739	30	51	81	-5.19	-4.54	0.38	0.33
		%	39.6%	49.8%	44.9%	58.3%	65.9%	61.9%	37.0%	60.0%	48.8%	Sig.	Sig.		
	Total	N	202	217	419	2300	2124	4424	81	85	166				
		%	100%	100%	100%	100%	100%	100%	100%	100%	100%				

Table 4

		Fall 2016 - WF (A)				Fall 2016 Census (B)			WF Registered in Spring 2017			Effect Size			
Age Group			Sex		Total	Sex		Total	Sex		Total	A vs. B Female	A vs. B Male	A vs. B Female	A vs. B Male
	Race/Ethnicity		Female	Male		Female	Male		Female	Male					
25 - 29	Asian	N	1	1	2	36	37	73	0	0	0				
		%	1.3%	1.9%	1.6%	3.8%	5.0%	4.4%	0.0%	0.0%	0.0%				
	Black/African American	N	35	18	53	241	113	354	10	3	13	3.53	2.73	0.44	0.42
		%	46.7%	33.3%	41.1%	25.7%	15.4%	21.2%	38.5%	23.1%	33.3%	Sig.	Not Sig.		
	Hispanic, Any Race	N	12	3	15	91	54	145	6	1	7				
		%	16.0%	5.6%	11.6%	9.7%	7.4%	8.7%	23.1%	7.7%	17.9%				
	American Indian/Alaskan Native	N	1	0	1	7	3	10	0	0	0				
		%	1.3%	0.0%	.8%	.7%	.4%	.6%	0.0%	0.0%	0.0%				
	Two or More Races	N	4	4	8	33	35	68	1	2	3				
		%	5.3%	7.4%	6.2%	3.5%	4.8%	4.1%	3.8%	15.4%	7.7%				
	Non-Resident Alien	N	0	1	1	13	2	15	0	0	0				
		%	0.0%	1.9%	.8%	1.4%	.3%	.9%	0.0%	0.0%	0.0%				
	Pacific Islander/Hawaiian Native	N	0	0	0	1	0	1	0	0	0				
		%	0.0%	0.0%	0.0%	.1%	0.0%	.1%	0.0%	0.0%	0.0%				
	Unknown	N	0	1	1	4	6	10	0	0	0				
		%	0.0%	1.9%	.8%	.4%	.8%	.6%	0.0%	0.0%	0.0%				
	White	N	22	26	48	512	483	995	9	7	16	-4.59	-2.53	0.52	0.36
		%	29.3%	48.1%	37.2%	54.6%	65.9%	59.5%	34.6%	53.8%	41.0%	Sig.	Not Sig.		
	Total	N	75	54	129	938	733	1671	26	13	39				
		%	100%	100%	100%	100%	100%	100%	100%	100%	100%				

Table 5

		Fall 2016 - WF (A)				Fall 2016 Census (B)			WF Registered in Spring 2017			Effect Size							
Age Group			Sex		Total	Sex		Total	Sex		Total	A vs. B Female	A vs. B Male	A vs. B Female	A vs. B Male				
	Race/Ethnicity		Female	Male		Female	Male		Female	Male									
30&+	Asian	N	2	1	3	56	39	95	1	0	1								
		%	2.1%	1.4%	1.8%	3.5%	3.6%	3.6%	2.6%	0.0%	1.7%								
	Black/African American	N	39	28	67	475	251	726	16	7	23	2.18	2.48	0.24	0.31				
		%	41.1%	37.8%	39.6%	29.8%	23.5%	27.3%	42.1%	33.3%	39.0%	Not Sig.	Not Sig.						
	Hispanic, Any Race	N	7	7	14	131	61	192	4	2	6								
		%	7.4%	9.5%	8.3%	8.2%	5.7%	7.2%	10.5%	9.5%	10.2%								
	American Indian/Alaskan Native	N	1	0	1	7	11	18	1	0	1								
		%	1.1%	0.0%	.6%	.4%	1.0%	.7%	2.6%	0.0%	1.7%								
	Two or More Races	N	3	3	6	26	18	44	2	1	3								
		%	3.2%	4.1%	3.6%	1.6%	1.7%	1.7%	5.3%	4.8%	5.1%								
	Non-Resident Alien	N	0	0	0	11	12	23	0	0	0								
		%	0.0%	0.0%	0.0%	.7%	1.1%	.9%	0.0%	0.0%	0.0%								
	Pacific Islander/Hawaiian Native	N	0	0	0	3	1	4	0	0	0								
		%	0.0%	0.0%	0.0%	.2%	.1%	.2%	0.0%	0.0%	0.0%								
	Unknown	N	1	1	2	4	29	33	0	0	0								
		%	1.1%	1.4%	1.2%	.3%	2.7%	1.2%	0.0%	0.0%	0.0%								
	White	N	42	34	76	882	647	1529	14	11	25					-2.11	-2.44	0.22	0.29
		%	44.2%	45.9%	45.0%	55.3%	60.5%	57.4%	36.8%	52.4%	42.4%					Not Sig.	Not Sig.		
	Total	N	95	74	169	1595	1069	2664	38	21	59								
		%	100%	100%	100%	100%	100%	100%	100%	100%	100%								