UNIVERSITY OF SOUTH ALABAMA

2019 Freshman Cohort Retention Report

Executive Summary

This report summarizes the one-year retention of 1,600 students in the University of South Alabama (USA) 2019 first-time full-time baccalaureate degree-seeking freshman cohort. The one-year retention rate for the 2019 freshman cohort was 76%.

Results indicated retention of students with a lower high school GPA or lower ACT Composite score or male students may require additional resources and monitoring to enable and/or encourage them to persist towards successfully completing a degree at USA. The USA Day results illustrated the importance of a prospective student coming to campus prior to enrolling. Additional efforts to invite and draw prospective students to campus are important for not just recruitment but also longer-term retention and persistence at the institution.

Students who participated in Greek life at USA were more likely to return to USA. This finding emphasizes the importance of students becoming involved in student organizations at USA that allow them to connect with students with similar interests outside of the classroom as well.

Financial aid related comparisons showed a relationship between the financial resources of the student and/or the student's family and retention. Students who received a Pell Grant, Subsidized Stafford Loan, or a NACAC fee waiver for ACT or SAT test-taking purposes returned at a lower rate than the overall cohort. To address this disparity, need-based grants could be utilized to assist students in greater need of financial support to encourage them to return to and persist towards completing a degree at USA.

The importance of financial support in the form of freshman scholarships was also clear. Additional USA freshman scholarships should be considered to continue to attract top students to attend USA.

Results also showed students who received an at-risk midterm grade (D, F, or U) in the Fall 2019 semester in four or more courses for lack of attendance and/or poor academic performance and students who were placed on probation after the Fall 2019 semester ended were unlikely to return to USA one year later. These findings highlight the importance of intervening prior to the end of the fall semester with students who receive an at-risk midterm grade to help prevent these students from subsequently receiving a low USA GPA and being placed on probation after the fall semester concludes.

Overview

The following report provides a detailed analysis about the one-year retention of the 1,600 first-time full-time baccalaureate degree-seeking freshmen students in the University of South Alabama (USA) 2019 freshman cohort. Retention in the context of this report is defined as whether freshmen students returned and enrolled one year later in the Fall 2020 semester. Similar to reports written by Institutional Research,

the input-environment-outcome (IEO) model developed by Alexander W. Astin[1] was used as a conceptual framework to guide this analysis.

Cross tabular results for each variable and whether the student returned are reported. Comparisons for each subgroup are made to the overall retention rate of the cohort (76%). Significant mean differences for the input, environmental, and outcome variables are also indicated.

Additionally, five logistic regression models were tested. The first model included the input[2] variables. The second model included the input and the environmental[3] variables. The third model included two outcome variables known midway through or after the end of the Fall 2019 semester[4]. The fourth model and fifth model tested a different outcome variable known after the end of the Summer 2020 semester[5]. The predictive power of each model for explaining whether the student would return (Yes/No) is reported as well as which variables were significant in each of the five models.

Cross Tabular Results

Cross tabular results for each variable and whether the student returned are summarized in the following section. Comparisons are made for each subgroup of the variable to the one-year retention rate (76%) of the 1,600 freshmen in the cohort. These comparisons illustrate which subgroups of students returned at higher, similar, or lower rates than the overall cohort retention rate of 76%. In addition, significant mean differences for the input, environmental, and the outcome variables known midway through or after the end of the Fall 2019 semester and after the end of the Summer 2020 semester are reported.

Input Variable Cross Tabular Results

For the input variables included in this analysis (see Table 1), female students (79%) returned at a higher rate than male students (72%). The mean difference between female students and male students was statistically significant (see Appendix: Independent T-Test Tables).

[1] Astin, A. W. (2002). Assessment for excellence: The philosophy and practice of assessment and evaluation in higher education. American Council on Education, Oryx Press.

[2] Input variables: Gender, race/ethnicity, age, region, first generation status, high school GPA, and ACT Composite score.

[3] Environmental variables: USA Day attendance, orientation session attended, college, USA freshman scholarship, Pell Grant, Subsidized Stafford Loan, test fee waiver, housing, learning community, First Year Experience course, and Greek life participation.

[4] Outcome variables midway through/after Fall 2019: Number of at-risk midterm grades received and probation status (model 3).

[5] Outcome variables after Summer 2019: USA hours earned (model 4) and USA GPA (model 5).

Table 1: Comparison of Input Variables to 2019 Cohort Retention Rate

Variable	Retention Rate >= 76%	Count	Retention Rate < 76%	Count
**Gender*				
	*Female (79%)	1,003	Male (72%)	597
Race/Ethnicity				
	Asian (86%)	62	African-American (75%)	279
	Other (79%)	70	Multiracial (71%)	82
	Non-Resident Alien (78%)	18	Hispanic (70%)	69
	White (77%)	1,020		
Age				
	17 years old or younger (79%)	42	19 years old (71%)	144
	18 years old (77%)	1,383	20 years old or older (65%)	31
Region				
	Mississippi service area (81%)	121	Florida service area (68%)	71
	Rest of Alabama (78%)	558		
	International (78%)	18		
	Mobile or Baldwin County (76%)	693		
	Rest of United States (76%)	139		
First Generation				
	Unknown (78%)	212	Yes (73%)	303
	No (77%)	1,085		
**High School GPA*				
	*3.51 or higher (82%)	1,071	3.01-3.5 (67%)	374
			3.0 Or lower (60%)	146
**ACT Composite Score*				
	*28-29 (88%)	129	26-27 (74%)	178
	30 or higher (86%)	184	19 or lower (73%)	258
	24-25 (79%)	248	20-21 (70%)	254
	22-23 (76%)	259		

Note: *Significant mean difference at .05 p level based on Independent T-Test for two group comparisons or at least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.

In terms of race/ethnicity, African-American (75%), multiracial (71%), and Hispanic (70%) students returned at a lower rate than the cohort retention rate (76%) while retention comparisons based on age showed that students who were 18 years old or younger returned at a higher rate (at least 77%) than the cohort retention rate (76%). Comparisons based on what region the student came from showed students from the Florida service area (68%) returned at a lower rate than the overall cohort (76%). In addition, the retention rate of students who indicated they were a first generation student (73%) on the Free Application for Federal Student Aid (FAFSA) application was lower than the overall cohort (76%).

As high school GPA decreased, retention also decreased. Students who had a high school GPA ranging between 3.01-3.5 or lower (at most 67%) returned at a lower rate than the overall cohort (76%). The mean difference between retention of students with a high school GPA of 3.51 or higher in comparison to both of the lower high school GPA groups was statistically significant (see Appendix: ANOVA Tables).

The highest two ACT Composite score groups of an ACT Composite score of 28-29 or 30 or higher returned at a higher rate (at least 86%) than the cohort retention rate (76%). The mean difference between retention of students with an ACT Composite score of 28-29 in comparison to students with an ACT Composite score of 26-27 or 22-23 or lower was also statistically significant (see Appendix: ANOVA Tables).

Environmental Variable Cross Tabular Results

For the environmental variables included in this analysis, USA Day attendance results (see Table 2) showed students who attended one or more USA Day (at least 80%) returned at a higher rate than the overall cohort (76%). Retention comparisons based on the college housing the major the student initially selected showed Arts and Sciences (71%) students returned at a lower rate than the overall cohort (76%). In addition, students who lived on campus (77%) returned at a higher rate than the overall cohort (76%).

Table 2: Comparison of Environmental Variables to 2019 Cohort Retention Rate

Variable	Retention Rate >= 76%	Count	Retention Rate < 76%	Count
USA Day Attendance				
	Attended Multiple USA Days (89%)	18	Did Not Attend (75%)	1,204
	Attended 1 USA Day (80%)	378		
**Orientation Session*				
	May Orientation (86%)	59	Freshman Session 5 (75%)	185
	*Freshman Session 2 (85%)	160	Freshman Session 8 (72%)	106
	Freshman Session 1 (83%)	166	Freshman Session 7 (68%)	154
	Freshman Session 3 (81%)	175	Freshman Session 9 (67%)	91
	Freshman Session 4 (80%)	189	Freshman Session 10 (66%)	80
	Freshman Session 6 (77%)	168	August/Other Orientation (64%)	67
College				
	Computing (81%)	101	Arts and Sciences (71%)	484
	Nursing (80%)	279		
	Allied Health (79%)	235		
	Engineering (79%)	168		
	Education (78%)	170		
	Business (76%)	163		
**USA Freshman Scholarship*				
	*Yes (80%)	934	No (72%)	666
**Pell Grant*				
	No (79%)	995	*Yes (72%)	605
**Subsidized Stafford Loan*				
	No (80%)	935	*Yes (72%)	665
**Test Fee Waiver*				
	No (77%)	1,489	*Yes (68%)	111
Housing				
	On campus (77%)	990	Off campus (75%)	610
Learning Community				
	No (79%)	320		
	Yes (76%)	1,280		
First Year Experience Course				
	No (79%)	490	Yes (75%)	1,110
**Greek Life Participation*				
	*Yes (89%)	207	No (75%)	1,393

Note: *Significant mean difference at .05 p level based on Independent T-Test for two group comparisons or at least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.

In terms of the orientation session attended, the retention rate of students who attended the May session, session 1-4, or session 6 freshman summer orientation sessions was at least 77%. Retention rates based on the orientation session attended ranged from a high of 86% for students who attended the May Session to a low of 64% for students who attended August/Other Orientation. When using the Freshman Session 2 orientation session as a comparison group, there was a significant mean difference between the Freshman Session 2 group in comparison to Freshman Session 7 (see Appendix: ANOVA Tables).

Scholarship retention rate comparisons illustrated that receiving scholarships positively affected retention. Students receiving a USA freshman scholarship (80%) returned at a higher rate than the cohort retention rate (76%). The mean difference between students who received a USA freshman scholarship compared to students who did not receive a USA freshman scholarship was statistically significant (see Appendix: Independent T-Test Tables).

Financial aid related comparisons showed a relationship between the financial resources of the student and/or the student's family and retention. Students who received a Pell Grant (72%), received a Subsidized Stafford Loan (72%), or received a NACAC fee waiver for ACT or SAT test-taking purposes (68%), due to meeting one of the indicators of economic need, returned at a lower rate than the overall cohort (76%). The mean difference for these three financial aid related comparisons between 1) students who received a Pell Grant compared to students who did not receive a Pell Grant, 2) students who received a Subsidized Stafford Loan compared to students who did not receive a Subsidized Stafford Loan, and 3) students who received a NACAC fee waiver compared to students who did not receive a NACAC fee waiver was statistically significant (see Appendix: Independent T-Test Tables).

A First Year Experience (FYE) course is typically one of the courses included in a learning community. Results showed students who participated in a learning community (76%) returned at a lower rate than students who did not participate in a learning community (79%). Similarly, students who took a FYE course (75%) returned at a lower rate compared to students who did not take a FYE course (79%).

Lastly, students who participated in Greek life (89%) returned at a higher rate than the overall cohort (76%). In addition, the mean difference between retention of students who participated in Greek life and students who did not participate in Greek life was statistically significant (see Appendix: Independent T-Test Tables).

Outcome Variable Midway Through or After Fall 2019 Cross Tabular Results

Outcome variables incorporated into this analysis that were known midway through or after Fall 2019 included the number of at-risk midterm grades (D, F, or U) a student had in Fall 2019 and whether the student was placed on probation after Fall 2019 (see Table 3). Students who had two or more at-risk midterm grade returned at a lower rate (at most 57%) than the overall cohort (76%). The mean difference for students who did not have an at-risk midterm grade in Fall 2019 compared to students who had an at-risk midterm grade in one or more courses was statistically significant (see Appendix: ANOVA Tables).

Table 3: Comparison of Outcome Variables Midway Through/After Fall 2019 to 2019 Cohort Retention Rate

Variable	Retention Rate >= 76%	Count	Retention Rate < 76%	Count
**Number of At-Risk Midterm Grades in Fall 2019*				
	*No At-Risk MT Grades (87%)	873	2 At-Risk MT Grades (57%)	149
	1 At-Risk MT Grade (80%)	380	3 At-Risk MT Grades (48%)	112
			4 or More At-Risk MT Grades (23%)	86
**Probation Status after Fall 2019*				
	No (85%)	1,341	*Yes (30%)	259
Note: *At least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.				

Students who were not on probation after Fall 2019 returned at a much higher rate (85%) compared to students who were placed on probation after the Fall 2019 semester ended (30%). The mean difference between students who were placed on probation and students who were not on probation was statistically significant (see Appendix: Independent T-Test Tables).

Outcome Variable After Summer 2020 Cross Tabular Results

Outcome variables incorporated into this analysis that were known after Summer 2020 included the number of hours earned after Summer 2020 at USA and the USA GPA after Summer 2020 (see Table 4). As the number of USA hours earned increased the retention rate also increased. For the most part, students with a higher USA GPA were more likely to return than students with a lower USA GPA.

Table 4: Comparison of Outcome Variables After Summer 2020 to 2019 Cohort Retention Rate

Variable	Retention Rate >= 76%	Count	Retention Rate < 76%	Count
**USA Hours Earned after Summer 2020*				
	*30.5 or more (96%)	729	12.5-18 (37%)	115
	24.5-30 (87%)	423	6.5-12 (10%)	92
	18.5-24 (80%)	121	0-6 (4%)	99
**USA GPA after Summer 2020*				
	3.51-4.0 (93%)	598	2.01-2.5 (71%)	134
	3.01-3.5 (89%)	369	*2.0 or lower (18%)	234
	2.51-3.0 (82%)	244		

Note: *At least one group with significant mean difference at .05 p level based on Games-Howell procedure for multiple group comparisons. Significantly different group indicated by orange fill color. Comparison group indicated by "*" and gray fill color.

Students who earned 18.5 to 24 or more hours at USA after Summer 2020 returned at a higher rate (at least 80%) compared to students who earned 12.5 to 18 or fewer hours (at most 37%). The mean difference between students who earned 30.5 or more hours at USA compared to students in all other USA hours earned groups was statistically significant (see Appendix: ANOVA Tables).

Students with a USA GPA of 2.51 to 3.0 or higher after Summer 2020 returned at a much higher rate (at least 82%) compared to students with a USA GPA of 2.01-2.5 or lower (at most 71%). Furthermore, the mean difference between students who had a USA GPA of 2.0 or lower compared to students in all other USA GPA groups was statistically significant (see Appendix: ANOVA Tables).

Logistic Regression Results

The focus of this study was to determine which student characteristics (inputs) and environmental characteristics (institutional/other support characteristics) can be used to best predict the retention of USA freshmen students. Since the focus of this study was prediction and classification of a dichotomous outcome variable, stepwise logistic regression was used. This technique allows for the identification of significant variables that contribute to the classification of individuals by using an algorithm to determine the importance of predictor variables. Stepwise logistic regression was used to identify significant variables in the model for predicting the outcome variable. Results of the final step for the model are reported including the classification rate for the model. Additionally, an analysis of the proportionate change in odds for significant variables is provided.

As a part of this study, five logistic models were tested. The first model included the input variables. The second model included the input variables and the environmental variables. The third model tested two outcome variables known midway through or after the Fall 2019 semester: 1) the number of at-risk midterm grades a student had in Fall 2019 and 2) whether the student was placed on probation after Fall 2019 to see what happened when these variables were used as predictors of retention. The fourth and fifth models tested a different outcome variable known after the Summer 2020 semester. The fourth model tested the number of USA hours earned after Summer 2020 and the fifth model tested the USA GPA after Summer 2020 to see what happened when these outcomes were used as individual predictors of retention.

The number of students (selected cases) included in each model varied based on what variables were included in the final model because some students in the cohort had missing data, such as a high school

GPA and/or an ACT Composite score. Because complete cases were required to compute the results, the final number of students used for each model ranged from a low of 1,504 students for the first and second models to a high of 1,600 students for the third model. The total number of students without any missing data for any of the variables used in the five different models was 1,485. The retention rate for this subset of 1,485 students was 78%. With a similar retention rate (78% compared to 76%) and 1,485 students representing 93% of the entire cohort, the models tested provided a solid representation of retention for this population. Since the focus for the models tested was to predict *returning* students, the outcome was coded with students not returning as a "0" and students *returning* as a "1". This focus meant results would predict the odds of whether the student would *return* one year later.

Model 1: Logistic Regression with Input Variables Only
The first model consisted of three steps (see Appendix: Logistic Regression Tables). The first model correctly classified students in this cohort who *returned* 100.0% of the time, but classified students who did not return 0.0% of the time. The overall correct classification rate for the first model was 76.9%.

For each variable included in the first model, a comparison group was selected (gender=male, race/ethnicity=White, age=17 years or younger, region=Mobile or Baldwin County, high school GPA=3.0 or lower, ACT Composite score=19 or lower, and first generation status=No).

In the first model, high school GPA, ACT Composite score, and gender were significant. The odds (Exp *B*) of a student *returning* was greater for a student in the two higher high school GPA comparison groups (3.01-3.5=1.410 and 3.51-4.0=2.592) than for a student with a high school GPA of 3.0 or lower. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student with a high school GPA of 3.51-4.0 than for a student with a high school GPA of 3.0 or lower.

Based on the ACT Composite score of a student, the odds (Exp *B*) of a student *returning* was greater for a student with an ACT Composite score of 24-25 (1.026), 28-29 (1.809), or 30 or higher (1.528) than for a student with an ACT Composite score of 19 or lower. In addition, the odds (Exp *B*) of a student *returning* was greater for a female student (1.331) than for a male student. The confidence intervals (95%) also indicated the odds of a female student *returning* was greater than for a male student.

Model 2: Logistic Regression with Input and Environmental Variables
The second model consisted of three steps (see Appendix: Logistic Regression Tables). The correct classification rate for the second model was 99.7% for *returning* students while the classification rate for the second model was 1.2% for students who did not return. The overall correct classification rate for the second model was 76.9%.

The second model included the input and also the environmental variables. For each environmental variable included in the second model a comparison group was selected (number of USA Days attended=did not attend, orientation session attended=either the August Orientation session, a transfer orientation session, or an unknown orientation session, the college housing the major the student selected at initial enrollment in Fall 2019=Arts and Sciences, whether the student received a USA freshman scholarship=no, whether the student received a Pell Grant=no, whether the student received a Subsidized Stafford Loan=yes, whether the student received a test fee waiver=no, whether the student lived on or off campus=off campus, whether the student participated in a learning community=no, whether the student took a First Year Experience course=no, and whether the student participated in Greek life=no).

Once again, high school GPA, ACT Composite score, and gender were significant in the second model. In addition, participation in Greek, whether the student received a Subsidized Stafford Loan, and USA Day attendance were significant.

The second model showed the odds (Exp *B*) of a student *returning* was greater for a student in the two higher high school GPA comparison groups (3.01-3.5=1.312 and 3.51-4.0=2.517) than for a student with a high school GPA of 3.0 or lower. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student with a high school GPA of 3.51-4.0 than for a student with a high school GPA of 3.0 or lower.

Based on the ACT Composite score of a student, the odds (Exp *B*) of a student *returning* was greater for a student with an ACT Composite score of 28-29 (1.533) or 30 or higher (1.268) than for a student with an ACT Composite score of 19 or lower. In addition, the odds (Exp *B*) of a student *returning* was greater for a female student (1.265) than for a male student.

When looking at participation in Greek life, the odds (Exp *B*) of a student *returning* was greater for a student that participated in Greek life (2.491) than for a student that did not participate. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student that participated in Greek life than non-participants.

Results showed the odds (Exp *B*) of a student *returning* was greater for a student that did not receive a Subsidized Stafford Loan (1.329) than for a student that received a Subsidized Stafford Loan. The confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student that did not receive a Subsidized Stafford Loan than for a student that received a Subsidized Stafford Loan. In addition, the odds (Exp *B*) of a student *returning* was greater for a student who attended one USA Day (1.346) or multiple USA Days (3.343) than for a student who did not attend a USA Day.

Model 3, Model 4, and Model 5: Logistic Regression Outcome Variable Models
Since outcomes of student success are different from inputs (student characteristics or institutional/other support characteristics), the third, fourth, and fifth models only included outcomes of interest after the Fall 2019 semester had already begun. The third model included outcome variables known midway through or after the Fall 2019 semester ended (number of at-risk midterm grades in Fall 2019 and probation status after Fall 2019). The fourth model (number of hours earned after Summer 2020) and fifth model (USA GPA the student attained after Summer 2020) included a different outcome variable known after the Summer 2020 semester ended. The first and second models can be used based on data known before or at least early on after the student comes to campus. However, the third, fourth, and fifth models can only be used after the Fall 2019 semester (third model) or Summer 2020 semester (fourth and fifth models) ended.

Model 3: Logistic Regression with Variables Midway Through or After Fall 2019
The third model (see Appendix: Logistic Regression Tables) consisted of two steps. The correct classification rate for the third model for *returning* students was 94.3% and for students who did not return the correct classification rate was 43.2%. The overall correct classification rate for the third model was 82.3%.

The third model included variables known midway through or after Fall 2019. For each variable included in the third model a comparison group was selected (number of at-risk midterm grades in Fall 2019=four or more at-risk midterm grades and whether the student was placed on probation after Fall 2019=yes).

In the third model, probation status after Fall 2019 and the number of at-risk midterm grades in Fall 2019 were significant (see Appendix: Logistic Regression Tables). The odds (Exp *B*) of a student *returning* was greater for a student who was not placed on probation after Fall 2019 (7.144) than for a student who was placed on probation after Fall 2019. The confidence intervals (95%) also supported this finding because the odds for a student *returning* was greater for a student who was not on probation after Fall 2019 than a student who was placed on probation after Fall 2019.

When looking at the number of at-risk (D, F, or U) midterm grades in Fall 2019, the odds (Exp *B*) of a student *returning* was greater for a student who had three or fewer at-risk midterm grades in Fall 2019 (no at-risk midterm grades=4.774, one at-risk midterm grade=3.612, two at-risk midterm grades=1.668, and three at-risk midterm grades=1.982) than for a student who had four or more at-risk midterm grades in Fall 2019. Except for students with two at-risk midterm grades in Fall 2019, the confidence intervals (95%) also indicated the odds of a student *returning* was greater for a student with fewer at-risk midterm grades in Fall 2019 than a student who had four or more at-risk midterm grades in Fall 2019.

Model 4: Logistic Regression with USA Hours Earned After Summer 2020
The fourth model included the USA hours earned after the end of the Summer 2020 semester. The comparison group selected for the fourth model was zero to six hours earned after the end of the Summer 2020 semester. Since the fourth model only included one variable, the model consisted of one step (see Appendix: Logistic Regression Tables). The correct classification rate for the fourth model for *returning* students was 95.5% and the correct classification rate for students who did not return was 70.1%. The overall correct classification rate for the fourth model was 89.7%.

The fourth model showed the odds (Exp *B*) of a student *returning* was greater for a student with 6.5-12 or more hours earned (6.5-12=2.575, 12.5-18=13.664, 18.5-24=95.990, 24.5-30=158.909, 30.5 or more=594.598) than for a student with six or fewer hours earned at the end of Summer 2020. Additionally, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the four higher USA hours earned comparison groups than for a student with zero to six USA hours earned.

Model 5: Logistic Regression with USA GPA After Summer 2020
The fifth model included the USA GPA after the end of the Summer 2020 semester. The comparison group selected for the fifth model was an USA GPA of 2.0 or lower after the end of the Summer 2020 semester. Since the fifth model only included one variable, the model consisted of one step (see Appendix: Logistic Regression Tables). The correct classification rate for the fifth model for *returning* students was 96.5% and the correct classification rate for students who did not return was 53.4%. The overall correct classification rate for the fifth model was 86.7%.

The fifth model showed the odds (Exp *B*) of a student *returning* was greater for a student with an USA GPA of 2.01-2.5 or higher (2.01-2.5=10.820, 2.51-3.0=20.763, 3.01-3.5=36.534, 3.51-4.0=54.586) than for a student with an USA GPA of 2.0 or lower at the end of Summer 2020. In addition, the confidence intervals (95%) indicated the odds of a student *returning* was greater for a student in the four higher USA GPA comparison groups than for a student with an USA GPA of 2.0 or lower.

Peer Comparisons
Finally, to better understand how USA one-year retention rates compared to peer institutions, the National Center for Education Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS) Data Center was used to compare USA one-year retention rates to the rates of nine peer institutions (see Table 5). A retention rate trend over a period of five years based on the latest available retention rate data in IPEDS showed the USA retention rate fell approximately in the middle of the comparison group over that period of time. The USA one-year retention rate over this period ranged from a low of 71% for the 2013 freshman cohort to a high of 78% for the 2016 freshman cohort. The one-year retention rate of peer institutions over this same period ranged from a low of 64% for the Wright State University 2017 freshman cohort to a high of 83% for the East Carolina University 2015 and 2016 freshman cohorts.

Table 5: One-Year Retention Rate Peer Comparisons * Ranked by 2017 Cohort Retention Rate * High to Low

Institution Name	2017 Cohort Retention	2016 Cohort Retention	2015 Cohort Retention	2014 Cohort Retention	2013 Cohort Retention
Florida Atlantic University	82	79	77	78	75
East Carolina University	81	83	83	80	81
Ohio University	81	80	82	79	80
University of North Dakota	80	81	80	81	80
University of Nevada-Las Vegas	76	74	77	74	77
University of Toledo	76	74	74	72	70
University of South Alabama	74	78	73	73	71
East Tennessee State University	73	76	71	71	69
University of Missouri-Kansas City	73	75	75	75	73
Wright State University	64	65	66	67	66

Source: National Center for Education Statistics IPEDS Data Center

Implications

Based on what we know about a student before the student steps foot on campus (input variables), one-year retention of students with lower high school GPAs and students with lower ACT Composite scores is a concern. This prompts further reflection regarding admission standards and the allocation of resources to support at-risk students. In addition, male students may require additional resources and monitoring to enable and/or encourage them to persist towards successfully completing a degree at USA.

When we look at the institutional support and other support provided to a student (environmental variables), students who participated in Greek life at USA were more likely to return to USA. This emphasizes the importance of students becoming involved in student organizations at USA that allow them to connect with students with similar interests outside of the classroom as well.

Financial aid related comparisons showed a relationship between the financial resources of the student and/or the student's family and retention. Students who received a Pell Grant, Subsidized Stafford Loan, or a NACAC fee waiver for ACT or SAT test-taking purposes returned at a lower rate than the overall cohort. To address this disparity, need-based grants could be utilized to assist students in greater need of financial support to encourage them to return to and persist towards completing a degree at USA.

The importance of financial support in the form of freshman scholarships was also clear. Additional USA freshman scholarships should be considered to continue to attract top students to attend USA.

In addition, recruitment activities in advance of the student enrolling at USA such as attending one or more USA Day may demonstrate a longer-term commitment of a student to persist towards completing a degree at USA. The USA Day results illustrated the importance of a prospective student coming to campus prior to enrolling. Additional efforts to invite and draw prospective students to campus are important for not just recruitment but also for longer-term retention and persistence at the institution.

Finally, results showed students who received four or more at-risk midterm grades (D, F, or U) in the Fall 2019 semester for lack of attendance and/or poor academic performance and students who were placed on probation after the Fall 2019 semester ended were unlikely to return to USA one year later. These findings highlight the importance of intervening prior to the end of the fall semester with students who receive an at-risk midterm grade to help prevent these students from subsequently receiving a low USA GPA and being placed on probation after the fall semester concludes.

Future Retention Research

This report is the first of two one-year retention studies about the 2019 freshman cohort that will be completed by the Office of Institutional Research during the Fall 2020 semester. The second retention

study will use National Student Clearinghouse data to explore the issue of “Where did non-returning freshmen in the 2019 cohort go?” This study will determine how many non-returning freshmen students transferred to another college or university or “stopped out” of college altogether.

APPENDIX

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * Gender * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Gender	Female	Count	210	793	1003
		% within Gender	20.9%	79.1%	100.0%
	Male	Count	167	430	597
		% within Gender	28.0%	72.0%	100.0%
Total		Count	377	1223	1600
		% within Gender	23.6%	76.4%	100.0%

2019 Cohort * Race * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Race	White	Count	235	785	1020
		% within Race	23.0%	77.0%	100.0%
	African-American	Count	69	210	279
		% within Race	24.7%	75.3%	100.0%
	Asian	Count	9	53	62
		% within Race	14.5%	85.5%	100.0%
	Hispanic	Count	21	48	69
		% within Race	30.4%	69.6%	100.0%
	Multiracial	Count	24	58	82
		% within Race	29.3%	70.7%	100.0%
	Non-Resident Alien	Count	4	14	18
		% within Race	22.2%	77.8%	100.0%
	Other	Count	15	55	70
		% within Race	21.4%	78.6%	100.0%
Total		Count	377	1223	1600
		% within Race	23.6%	76.4%	100.0%

2019 Cohort * Under Represented Minority * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Under Represented Minority	Non URM/Unknown	Count	286	957	1243
		% within Under Represented Minority	23.0%	77.0%	100.0%
	Under Represented Minority	Count	91	266	357
		% within Under Represented Minority	25.5%	74.5%	100.0%
Total		Count	377	1223	1600
		% within Under Represented Minority	23.6%	76.4%	100.0%

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * Age * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Age	17 years or younger	Count	9	33	42
		% within Age	21.4%	78.6%	100.0%
	18 years old	Count	315	1068	1383
		% within Age	22.8%	77.2%	100.0%
	19 years old	Count	42	102	144
		% within Age	29.2%	70.8%	100.0%
	20 years or older	Count	11	20	31
		% within Age	35.5%	64.5%	100.0%
Total		Count	377	1223	1600
		% within Age	23.6%	76.4%	100.0%

2019 Cohort * Region * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Region	Mobile or Baldwin County	Count	168	525	693
		% within Region	24.2%	75.8%	100.0%
	Rest of Alabama	Count	125	433	558
		% within Region	22.4%	77.6%	100.0%
	Mississippi Service Area	Count	23	98	121
		% within Region	19.0%	81.0%	100.0%
	Florida Service Area	Count	23	48	71
		% within Region	32.4%	67.6%	100.0%
	Rest of United States	Count	34	105	139
		% within Region	24.5%	75.5%	100.0%
	International	Count	4	14	18
		% within Region	22.2%	77.8%	100.0%
Total		Count	377	1223	1600
		% within Region	23.6%	76.4%	100.0%

2019 Cohort * First Generation * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
First Generation	No	Count	250	835	1085
		% within First Generation	23.0%	77.0%	100.0%
	Yes	Count	81	222	303
		% within First Generation	26.7%	73.3%	100.0%
	Unknown	Count	46	166	212
		% within First Generation	21.7%	78.3%	100.0%
Total		Count	377	1223	1600
		% within First Generation	23.6%	76.4%	100.0%

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * High School GPA * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
High School GPA	3.0 or lower	Count	58	88	146
		% within High School GPA	39.7%	60.3%	100.0%
	3.01-3.5	Count	123	251	374
		% within High School GPA	32.9%	67.1%	100.0%
	3.51 or higher	Count	194	877	1071
		% within High School GPA	18.1%	81.9%	100.0%
Total		Count	375	1216	1591
		% within High School GPA	23.6%	76.4%	100.0%

2019 Cohort * ACT * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
ACT	19 or lower	Count	69	189	258
		% within ACT	26.7%	73.3%	100.0%
	20-21	Count	77	177	254
		% within ACT	30.3%	69.7%	100.0%
	22-23	Count	63	196	259
		% within ACT	24.3%	75.7%	100.0%
	24-25	Count	52	196	248
		% within ACT	21.0%	79.0%	100.0%
	26-27	Count	46	132	178
		% within ACT	25.8%	74.2%	100.0%
	28-29	Count	16	113	129
		% within ACT	12.4%	87.6%	100.0%
	30 or higher	Count	26	158	184
		% within ACT	14.1%	85.9%	100.0%
Total		Count	349	1161	1510
		% within ACT	23.1%	76.9%	100.0%

2019 Cohort * Number USA Days Attended * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Number USA Days Attended	Did Not Attend	Count	299	905	1204
		% within Number USA Days Attended	24.8%	75.2%	100.0%
	Attended 1 USA Day	Count	76	302	378
		% within Number USA Days Attended	20.1%	79.9%	100.0%
	Attended Multiple USA Days	Count	2	16	18
		% within Number USA Days Attended	11.1%	88.9%	100.0%
Total		Count	377	1223	1600
		% within Number USA Days Attended	23.6%	76.4%	100.0%

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * Orientation * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Orientation	August/Transfer/Unknown Orientation	Count	24	43	67
		% within Orientation	35.8%	64.2%	100.0%
	May Orientation	Count	8	51	59
		% within Orientation	13.6%	86.4%	100.0%
	Freshman Session 1	Count	28	138	166
		% within Orientation	16.9%	83.1%	100.0%
	Freshman Session 2	Count	24	136	160
		% within Orientation	15.0%	85.0%	100.0%
	Freshman Session 3	Count	34	141	175
		% within Orientation	19.4%	80.6%	100.0%
	Freshman Session 4	Count	37	152	189
		% within Orientation	19.6%	80.4%	100.0%
	Freshman Session 5	Count	47	138	185
		% within Orientation	25.4%	74.6%	100.0%
	Freshman Session 6	Count	39	129	168
		% within Orientation	23.2%	76.8%	100.0%
	Freshman Session 7	Count	49	105	154
		% within Orientation	31.8%	68.2%	100.0%
	Freshman Session 8	Count	30	76	106
		% within Orientation	28.3%	71.7%	100.0%
	Freshman Session 9	Count	30	61	91
		% within Orientation	33.0%	67.0%	100.0%
	Freshman Session 10	Count	27	53	80
		% within Orientation	33.8%	66.3%	100.0%
Total		Count	377	1223	1600
		% within Orientation	23.6%	76.4%	100.0%

2019 Cohort * College * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
College	AH	Count	49	186	235
		% within College	20.9%	79.1%	100.0%
	AS	Count	140	344	484
		% within College	28.9%	71.1%	100.0%
	BU	Count	39	124	163
		% within College	23.9%	76.1%	100.0%
	CS	Count	19	82	101
		% within College	18.8%	81.2%	100.0%
	ED	Count	37	133	170
		% within College	21.8%	78.2%	100.0%
	EG	Count	36	132	168
		% within College	21.4%	78.6%	100.0%
	NU	Count	57	222	279
		% within College	20.4%	79.6%	100.0%
Total		Count	377	1223	1600
		% within College	23.6%	76.4%	100.0%

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * Freshman Scholarship * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Freshman Scholarship	No	Count	187	479	666
		% within Freshman Scholarship	28.1%	71.9%	100.0%
	Yes	Count	190	744	934
		% within Freshman Scholarship	20.3%	79.7%	100.0%
Total		Count	377	1223	1600
		% within Freshman Scholarship	23.6%	76.4%	100.0%

2019 Cohort * Pell Grant * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Pell Grant	No	Count	210	785	995
		% within Pell Grant	21.1%	78.9%	100.0%
	Yes	Count	167	438	605
		% within Pell Grant	27.6%	72.4%	100.0%
Total		Count	377	1223	1600
		% within Pell Grant	23.6%	76.4%	100.0%

2019 Cohort * Subsidized Stafford Loan * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Subsidized Stafford Loan	No	Count	191	744	935
		% within Subsidized Stafford Loan	20.4%	79.6%	100.0%
	Yes	Count	186	479	665
		% within Subsidized Stafford Loan	28.0%	72.0%	100.0%
Total		Count	377	1223	1600
		% within Subsidized Stafford Loan	23.6%	76.4%	100.0%

2019 Cohort * Received Test Fee Waiver * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Received Test Fee Waiver	No	Count	341	1148	1489
		% within Received Test Fee Waiver	22.9%	77.1%	100.0%
	Yes	Count	36	75	111
		% within Received Test Fee Waiver	32.4%	67.6%	100.0%
Total		Count	377	1223	1600
		% within Received Test Fee Waiver	23.6%	76.4%	100.0%

2019 Cohort * Housing * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Housing	Off-Campus	Count	152	458	610
		% within Housing	24.9%	75.1%	100.0%
	On-Campus	Count	225	765	990
		% within Housing	22.7%	77.3%	100.0%
Total		Count	377	1223	1600
		% within Housing	23.6%	76.4%	100.0%

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * Learning Community * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Learning Community	No	Count	66	254	320
		% within Learning Community	20.6%	79.4%	100.0%
	Yes	Count	311	969	1280
		% within Learning Community	24.3%	75.7%	100.0%
Total		Count	377	1223	1600
		% within Learning Community	23.6%	76.4%	100.0%

2019 Cohort * Took First Year Experience Course * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Took FYE Course	No	Count	101	389	490
		% within Took FYE Course	20.6%	79.4%	100.0%
	Yes	Count	276	834	1110
		% within Took FYE Course	24.9%	75.1%	100.0%
Total		Count	377	1223	1600
		% within Took FYE Course	23.6%	76.4%	100.0%

2019 Cohort * Greek Life Participation * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Greek Life Participation	No	Count	355	1038	1393
		% within Greek Life Participation	25.5%	74.5%	100.0%
	Yes	Count	22	185	207
		% within Greek Life Participation	10.6%	89.4%	100.0%
Total		Count	377	1223	1600
		% within Greek Life Participation	23.6%	76.4%	100.0%

2019 Cohort * Number At Risk Midterm Grades in Fall 2019 * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Number At Risk Midterm Grades in Fall 2019	4 or More At Risk MT Grades	Count	66	20	86
		% within Number At Risk Midterm Grades	76.7%	23.3%	100.0%
	3 At Risk MT Grades	Count	58	54	112
		% within Number At Risk Midterm Grades	51.8%	48.2%	100.0%
	2 At Risk MT Grades	Count	64	85	149
		% within Number At Risk Midterm Grades	43.0%	57.0%	100.0%
	1 At Risk MT Grade	Count	75	305	380
		% within Number At Risk Midterm Grades	19.7%	80.3%	100.0%
	No At Risk MT Grades	Count	114	759	873
		% within Number At Risk Midterm Grades	13.1%	86.9%	100.0%
Total		Count	377	1223	1600
		% within Number At Risk Midterm Grades	23.6%	76.4%	100.0%

2019 Freshman Cohort Retention Report Cross Tabs

2019 Cohort * Probation After Fall 2019 * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
Probation After Fall 2019	No	Count	196	1145	1341
		% within Probation After Fall 2019	14.6%	85.4%	100.0%
	Yes	Count	181	78	259
		% within Probation After Fall 2019	69.9%	30.1%	100.0%
Total		Count	377	1223	1600
		% within Probation After Fall 2019	23.6%	76.4%	100.0%

2019 Cohort * USA Hours Earned After Summer 2019 * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
USA Hours Earned After Summer 2019	0-6 hours	Count	95	4	99
		% within USA Hours Earned	96.0%	4.0%	100.0%
	6.5-12 hours	Count	83	9	92
		% within USA Hours Earned	90.2%	9.8%	100.0%
	12.5-18 hours	Count	73	42	115
		% within USA Hours Earned	63.5%	36.5%	100.0%
	18.5-24 hours	Count	24	97	121
		% within USA Hours Earned	19.8%	80.2%	100.0%
	24.5-30 hours	Count	55	368	423
		% within USA Hours Earned	13.0%	87.0%	100.0%
	30.5 or more hours	Count	28	701	729
		% within USA Hours Earned	3.8%	96.2%	100.0%
Total		Count	358	1221	1579
		% within USA Hours Earned	22.7%	77.3%	100.0%

2019 Cohort * USA GPA After Summer 2019 * One-Year Retention Crosstabulation

			One-Year Retention		
			No	Yes	Total
USA GPA After Summer 2019	2.0 or lower	Count	191	43	234
		% within USA GPA	81.6%	18.4%	100.0%
	2.01-2.5	Count	39	95	134
		% within USA GPA	29.1%	70.9%	100.0%
	2.51-3.0	Count	43	201	244
		% within USA GPA	17.6%	82.4%	100.0%
	3.01-3.5	Count	40	329	369
		% within USA GPA	10.8%	89.2%	100.0%
	3.51-4.0	Count	45	553	598
		% within USA GPA	7.5%	92.5%	100.0%
Total		Count	358	1221	1579
		% within USA GPA	22.7%	77.3%	100.0%