

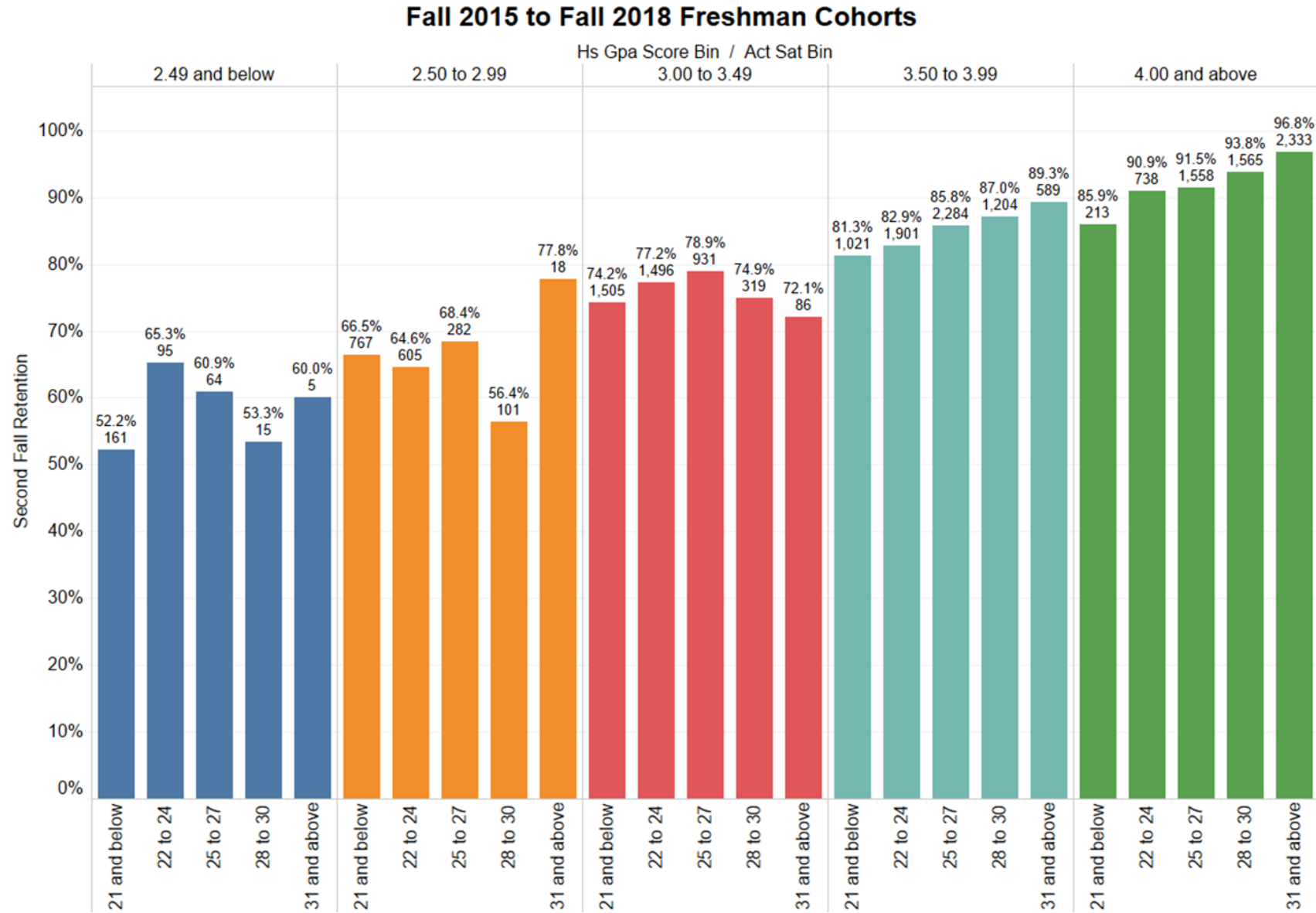
# Test Optional Policy Student Success Assessment

January 2023

# Background

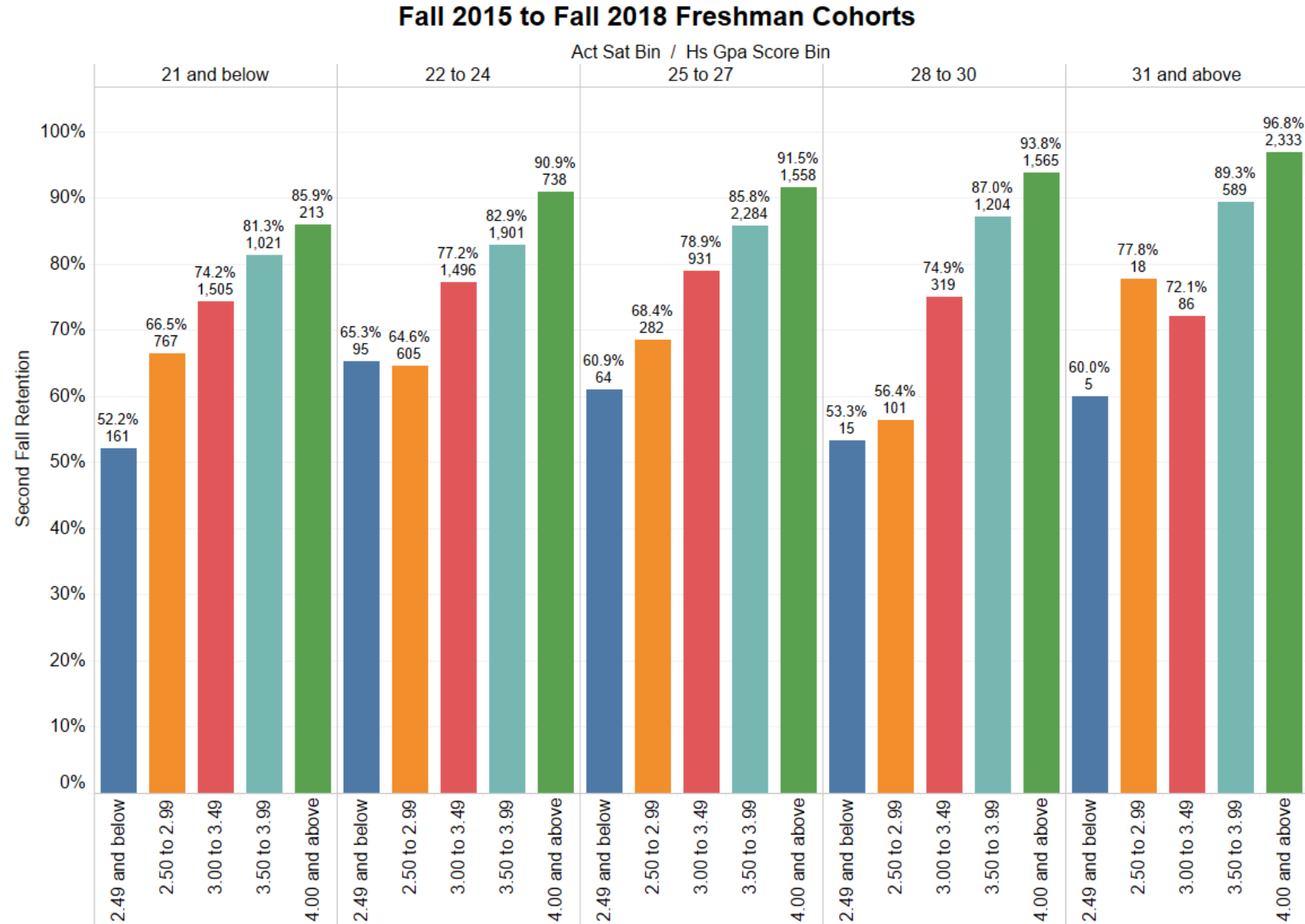
# ACT Bins and HS GPA Bins vs 2<sup>nd</sup> Fall Retention

- National and internal research has long indicated that HS GPA was a better predictor of student success than test scores
- As a visual example, here is 2<sup>nd</sup> Fall Retention for test scores across HS GPA bins. There appears to be a relationship above 3.5 but it is not pronounced and much weaker below this threshold

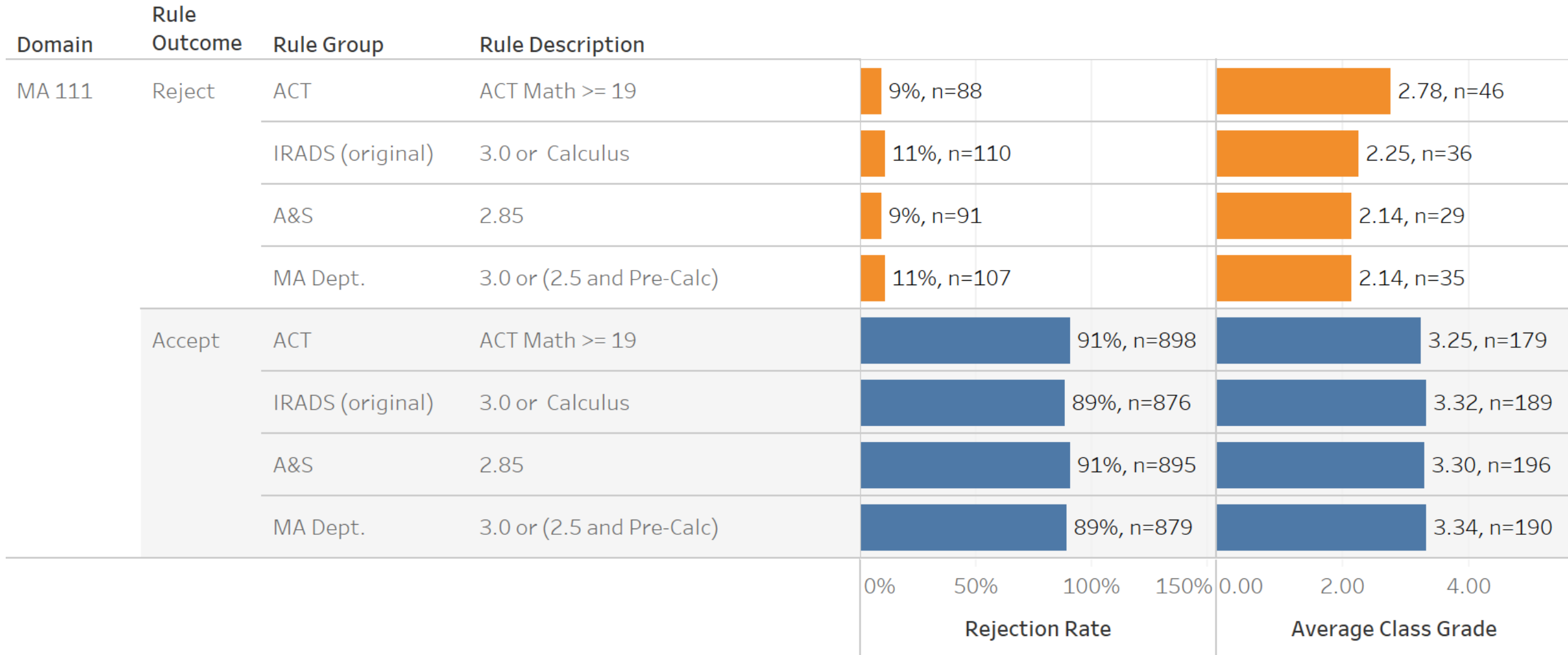


## ACT Bins and HS GPA Bins vs 2<sup>nd</sup> Fall Retention

- However, by simply reversing the bins, you clearly see the strong relationship across test score bins, indicating that HS GPA is a good predictor of 2<sup>nd</sup> Fall Retention regardless of Test Scores
- In summer 2020, IRADS began work on developing test optional rules to replace existing criteria based on ACT (or SAT equivalent) due to the pandemic as well as long held concerns around standardized tests across campus



# MA Prerequisite Transcript Rules Example of rule related analytics to inform discussions from Fall 2020



# Admissions rules as implemented for Fall 2021

## Test Optional Admissions

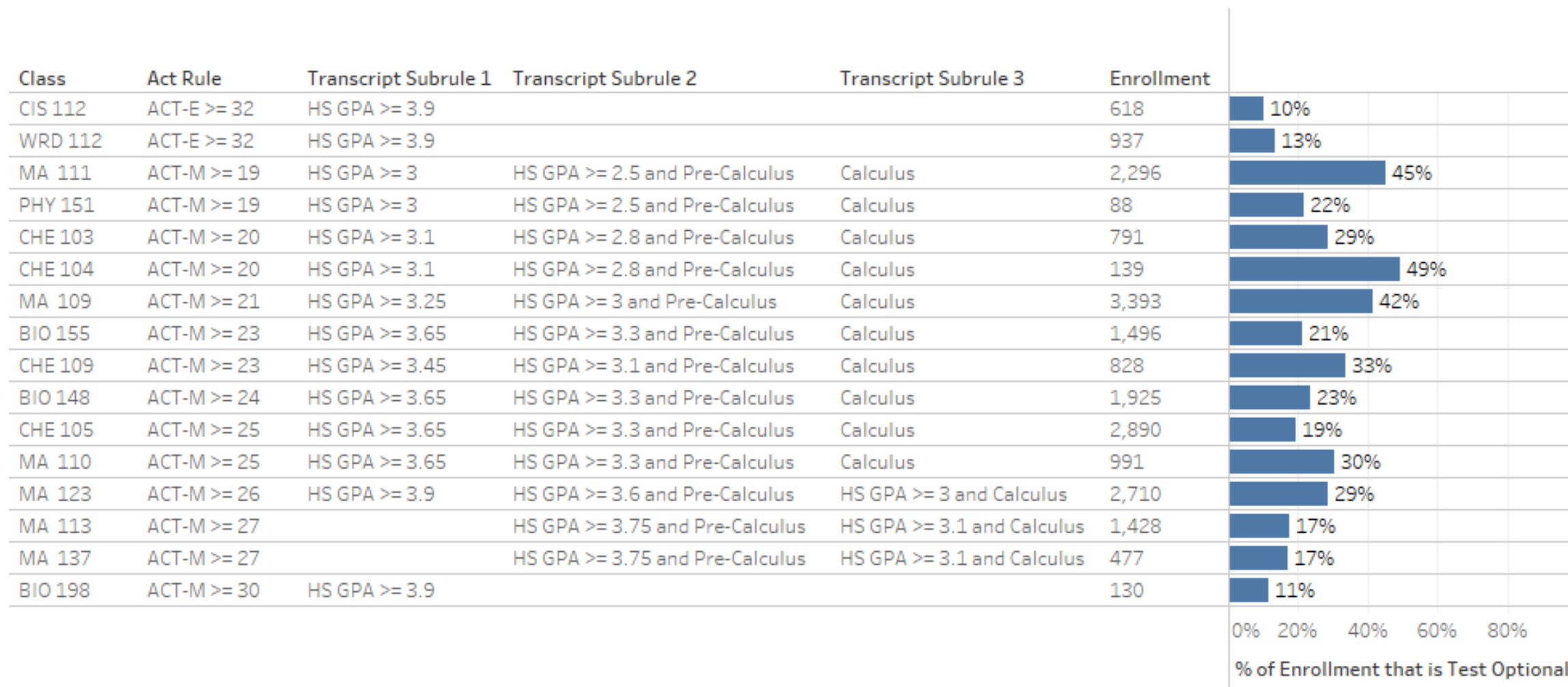
### Rules and test optional rates Fall 2021 and 2022 Cohorts

Rule Group	Act Rule Text	Trans Rule1 Text	Trans Rule2 Text	Trans Rule3 Text	Affected Enrollment	% of Enrollment that is Test Optional
Math Readiness	ACT-M $\geq$ 19	HS GPA $\geq$ 3.0	HS GPA $\geq$ 2.5 and Pre-Calc	Calculus	10,551	29%
Reading Readiness	ACT-R $\geq$ 20	HS GPA $\geq$ 2.9			10,551	29%
Writing Readiness	ACT-E $\geq$ 18	HS GPA $\geq$ 2.9			10,551	29%
Engineering Admissions	ACT-M $\geq$ 25 and HS GPA $\geq$ 3.0	HS GPA $\geq$ 3.65	HS GPA $\geq$ 3.3 and Pre-Calc	HS GPA $\geq$ 3.0 and Calculus	1,424	13%
Health Sciences Admissions	ACT-M $\geq$ 23	HS GPA $\geq$ 3.45	HS GPA $\geq$ 3.1 and Pre-Calc	Calculus	554	25%
Nursing Admissions	ACT-M $\geq$ 22 and HS GPA $\geq$ 3.25	HS GPA $\geq$ 3.40			660	30%

# Class prerequisite rules as implemented for Fall 2021

## Test Optional Class Prerequisites

Rules and test optional rates Fall 2021 - Spring 2023

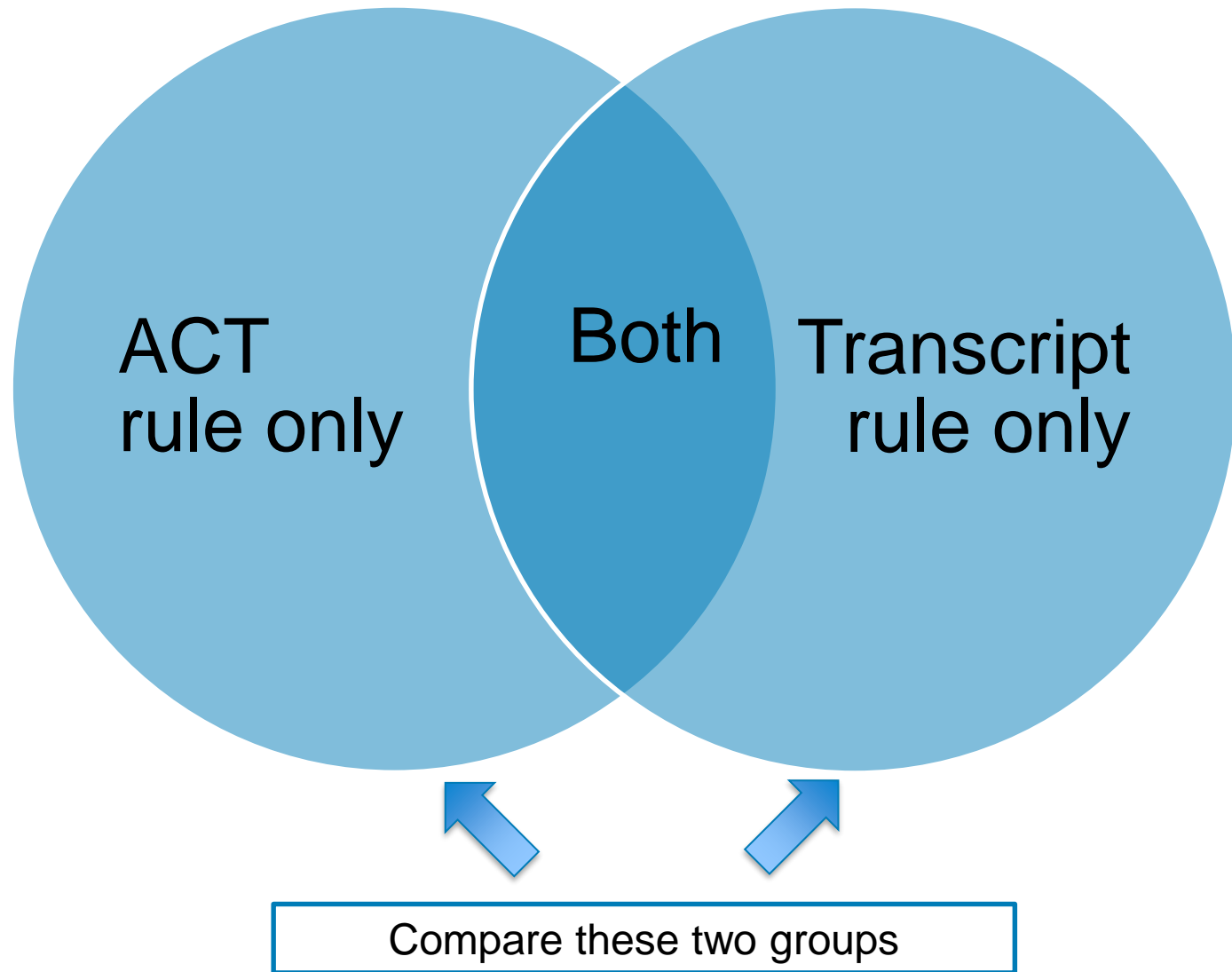


# Analysis



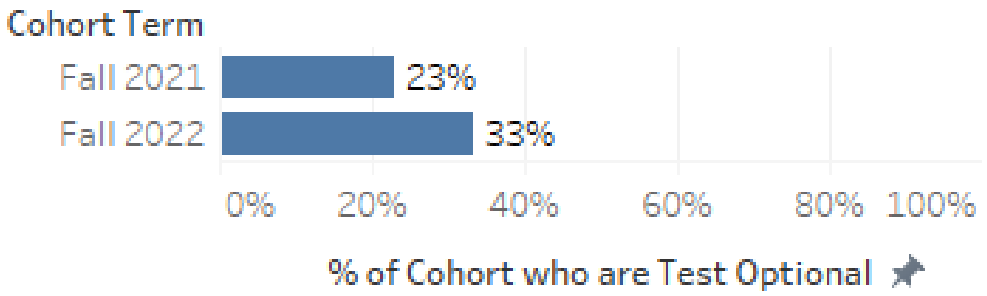
Three ways students can qualify under test optional rules

We can isolate the effectiveness of the two rule sets by looking at students who qualify for each rule set, but not the other

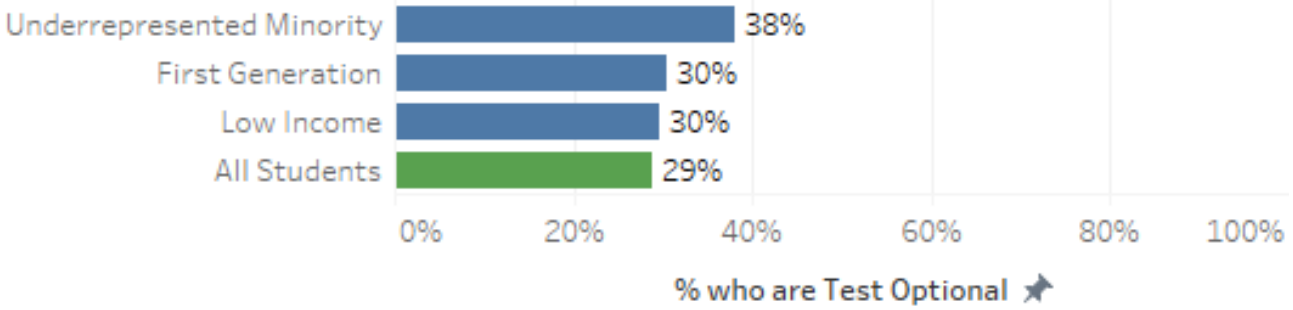


# Test Optional demographic information

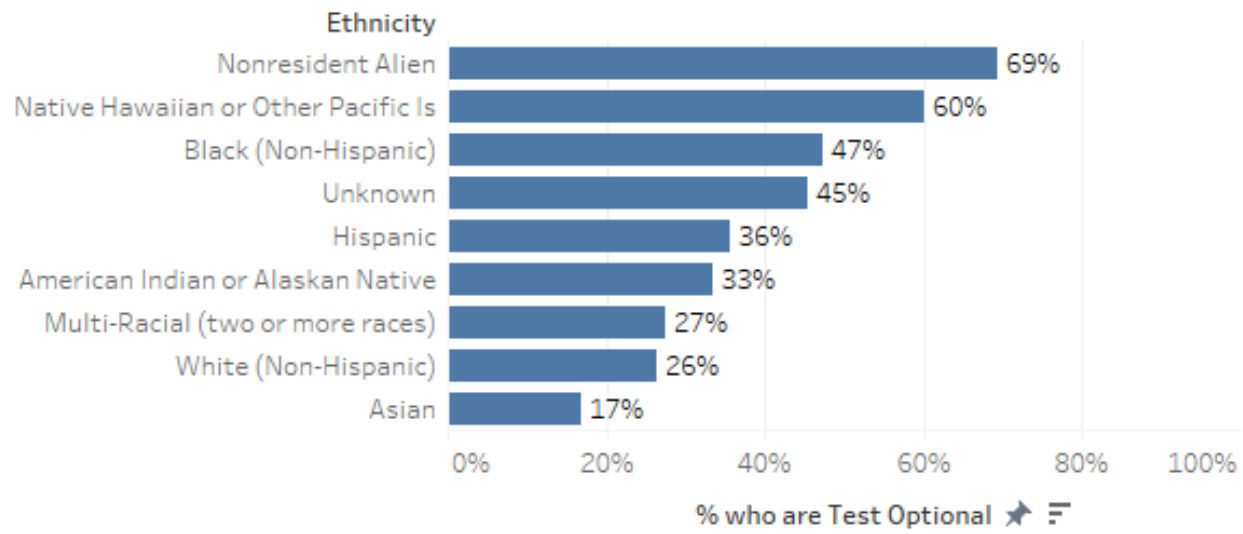
## Test Optional Frequency By Cohort



## Test Optional Frequency for Fall 2021, 2022 Cohorts by Subgroup

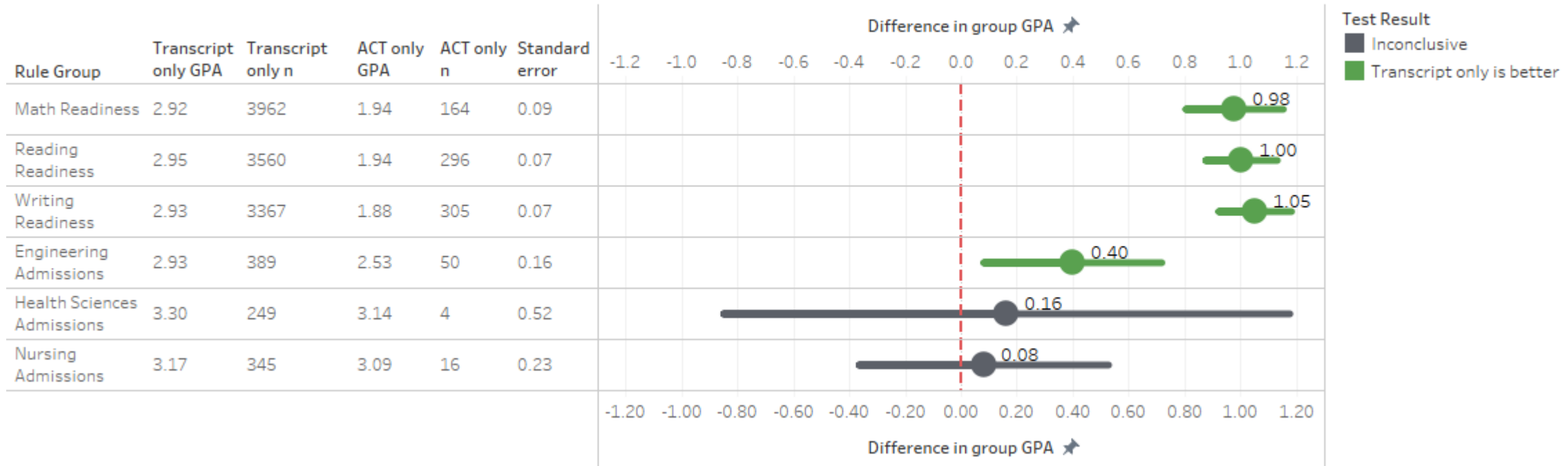


## Test Optional Frequency for Fall 2021, 2022 Cohorts by Ethnicity



# Admissions rules and student success

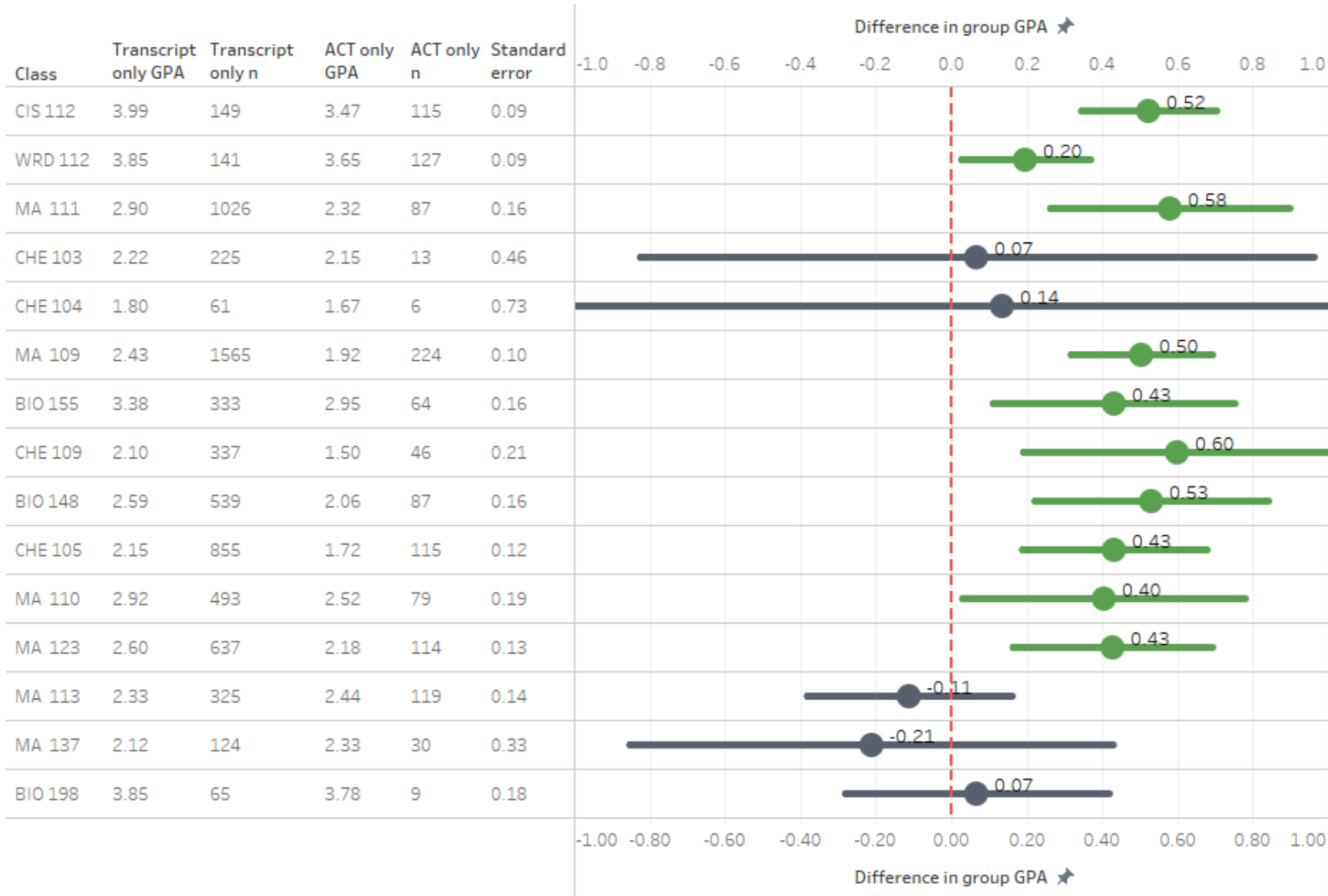
Cumulative GPA - Transcript only minus ACT only



- Group differences for cumulative GPA to date for the Fall 2021 and 2022 cohorts
  - All readiness transcript rules outperform the ACT rule by at least 0.7 GPA points
  - The difference is less for Engineering Admissions but still significant

# Class Prerequisite Rules and Student Success

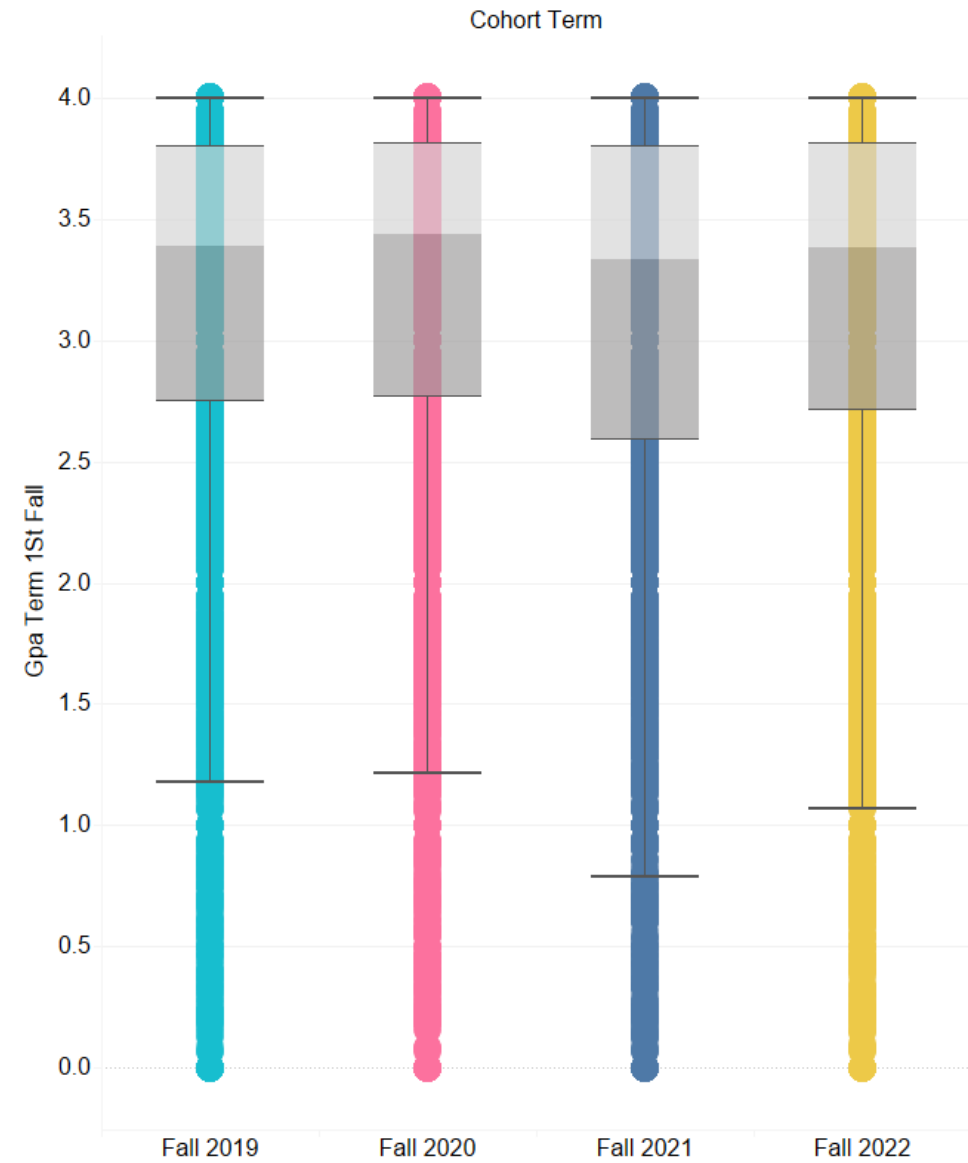
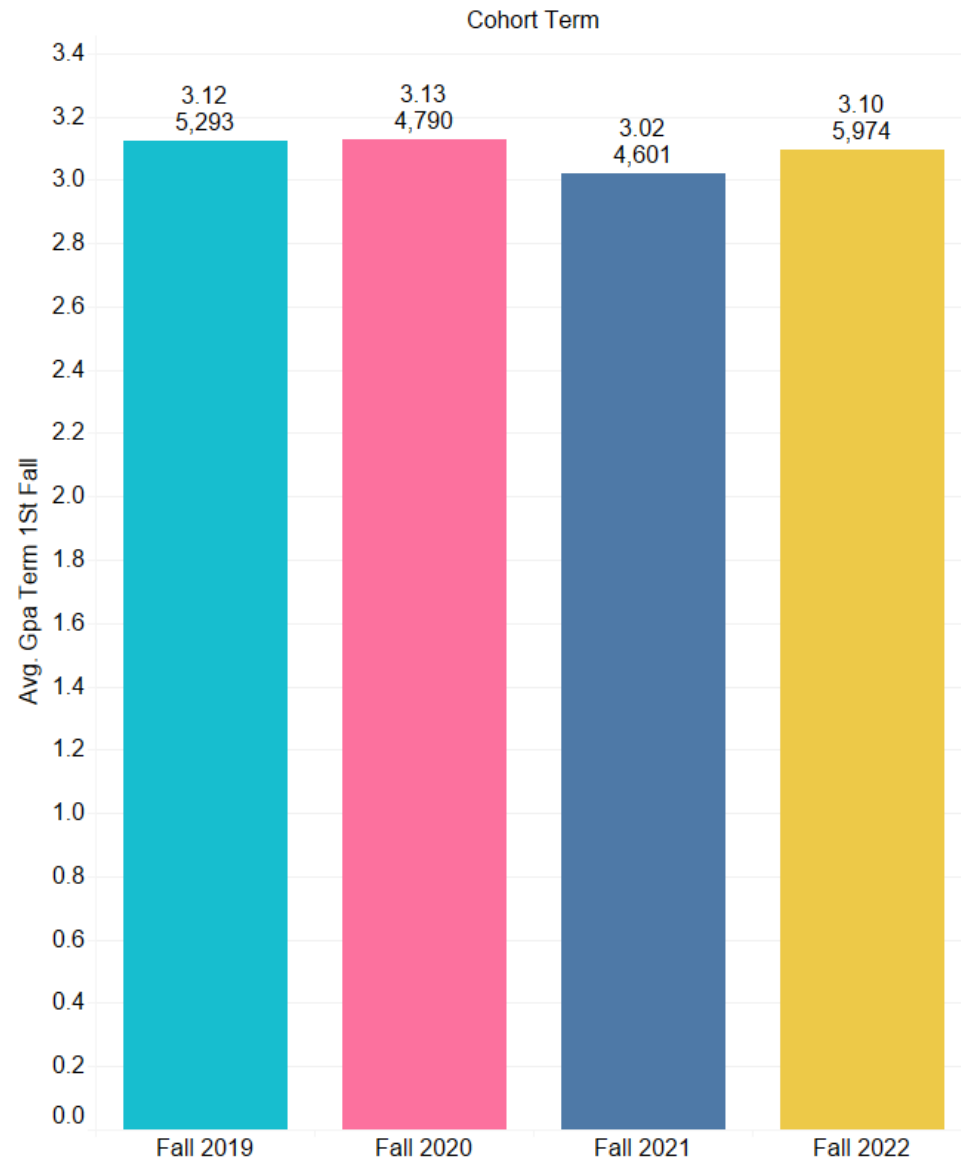
Class Grade (GPA) - Transcript only minus ACT only



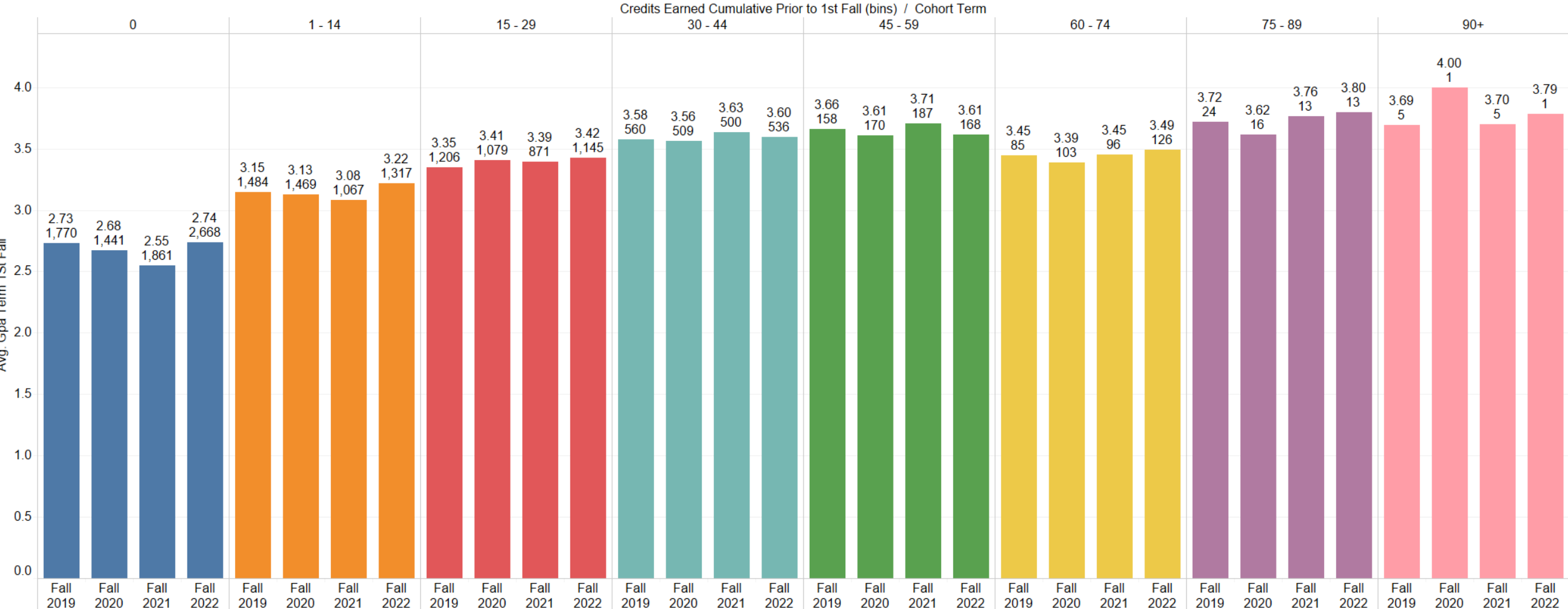
Test Result  
■ Inconclusive  
■ Transcript only is better

- Group differences for the ABC rate with 95% confidence intervals for Fall 2021 – Fall 2022
- All of the significant differences (10 of the 15) showed better performance for transcript only

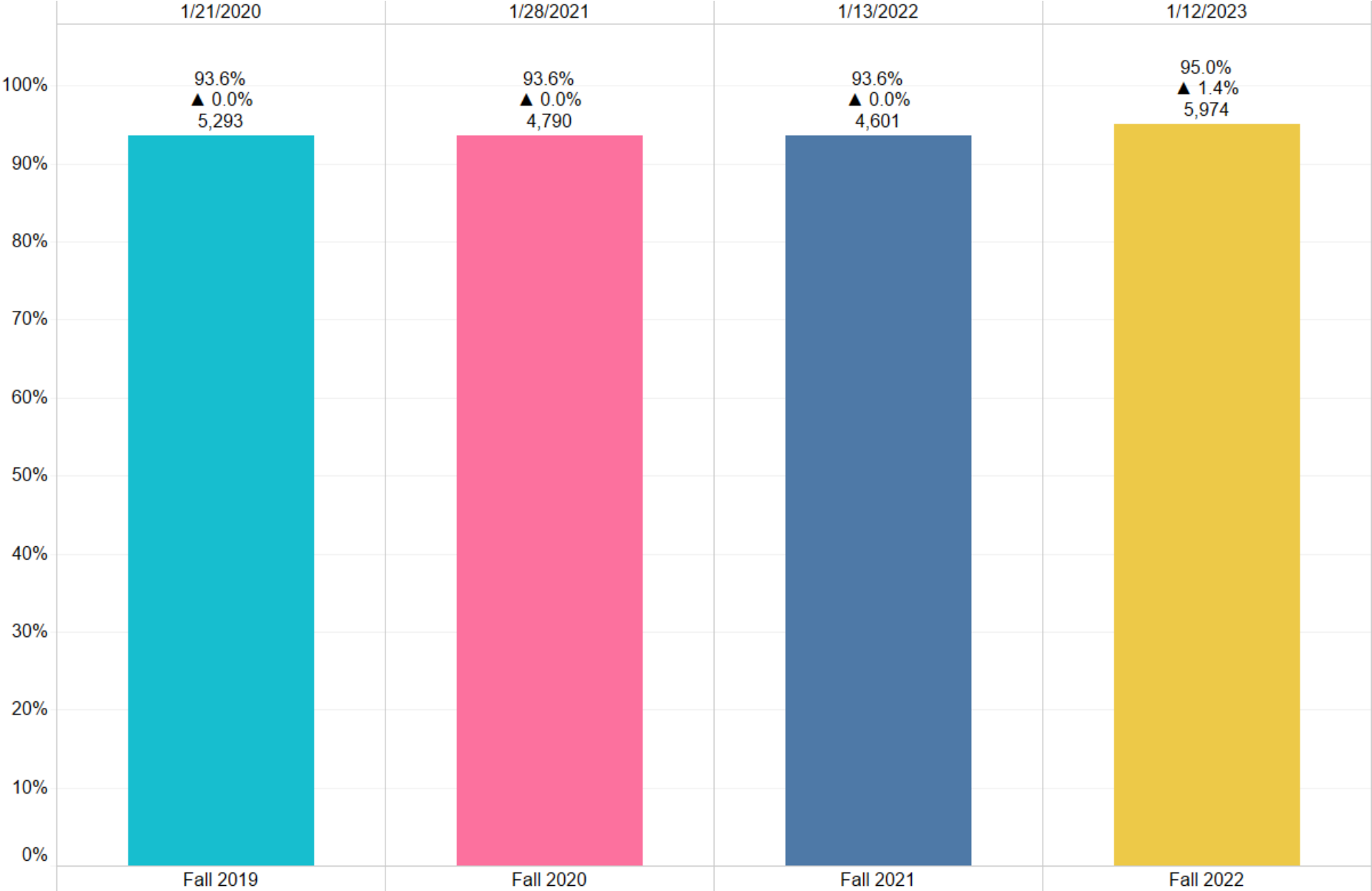
# Freshman Cohorts – 1<sup>st</sup> Fall GPA



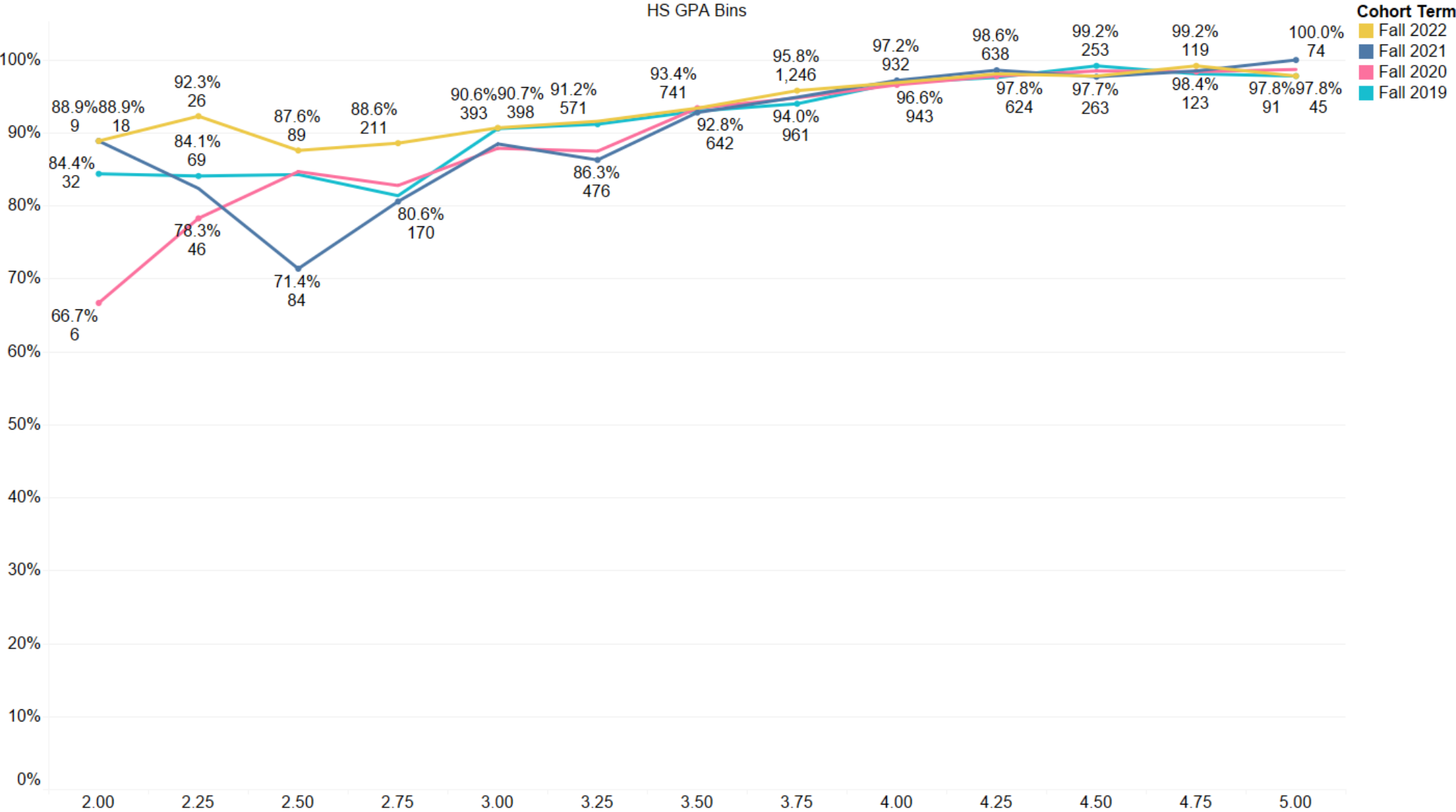
# Freshman Cohorts – 1<sup>st</sup> Fall GPA



# Freshman Cohorts – 1<sup>st</sup> Spring Retention



# Freshman Cohorts – 1<sup>st</sup> Spring Retention





# Questions