

Are ND high school graduates enrolling at a lower rate than expected in Fall 2020 at NDUS institutions?

Figure 1 below shows the NDUS enrollment rate for students who graduate from North Dakota high schools and enroll in the fall semester immediately following high school graduation.

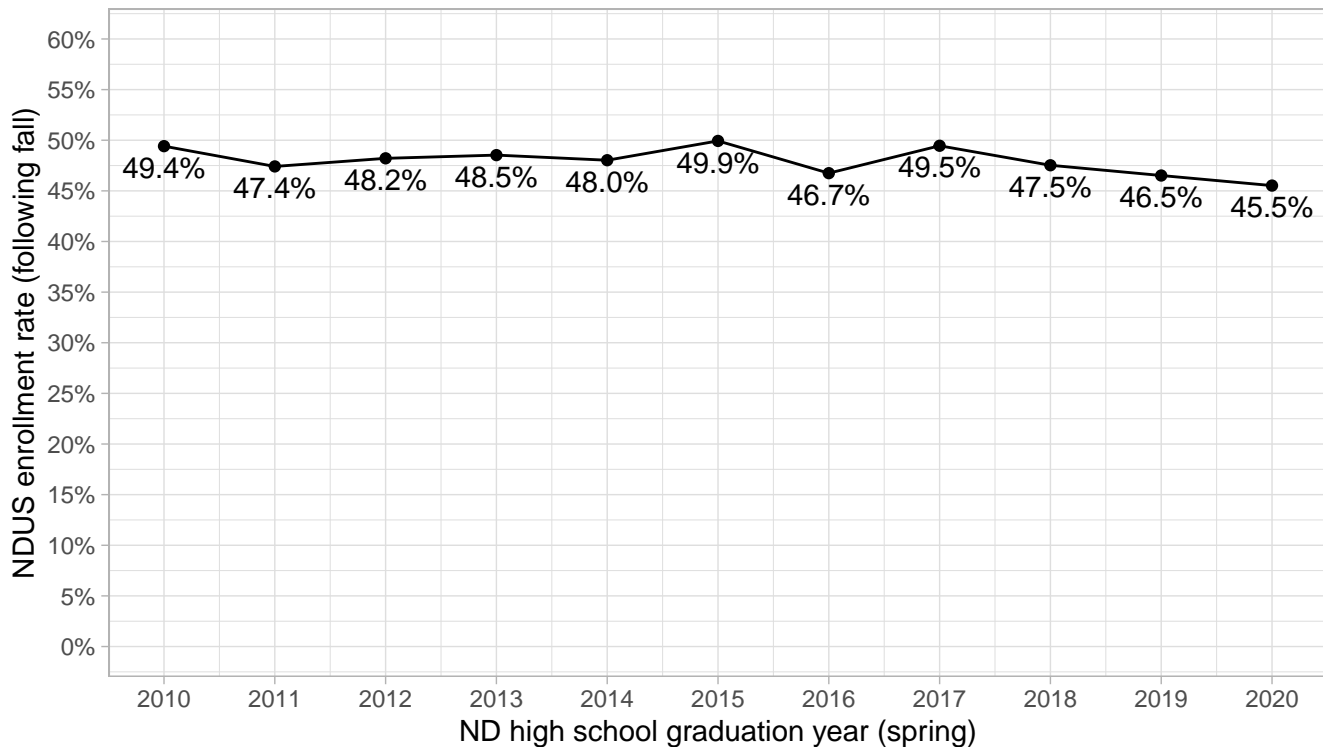


Figure 1: NDUS enrollment rates by graduating seniors in North Dakota high schools, 2010-2020

For the most part, enrollments appear to be mostly stable, staying between 45% and 50% across the 11 years listed. While the enrollments are lower in 2020 than prior years, it is also part of an overall downward trend. To further examine whether or not enrollments in 2020 are lower than would have been expected in a year without the effect of coronavirus, a logistic regression model was fitted to students from 2017-2019, with a confidence interval created for the 2020 year.

70% of students were used to train the model ($n = 12872$), while 30% were used to test it ($n = 5536$). ACT Composite scores, GPA, IEP, Free/Reduced lunch status, and ELL status were all utilized in the regression model, resulting in an AUC of 0.6745.

Utilizing this prediction model based on students from 2017-2019, it was estimated with a 95% prediction interval that between 49.6% and 54.3% of students would be expected to enroll in Fall 2020 after graduating in Spring 2019 from a North Dakota high school. Of the 6132 students in the graduating class of 2019, 2969 (45.5%) enrolled immediately in the Fall of 2020 in NDUS. This represents a departure of between 73-359 students from what was expected based on the previous three years of students. Whether or not this is directly attributable to coronavirus is unclear.