

Distance From College Enrollment= $54.88 - 0.70 \cdot Percent Not White + 6.06 \cdot Non-Charter School$

The city of "Chicago has the distinction of being not just one of the most racially segregated cities in America, but it appears to be durably so" (Sampson 2024, 107), a reputation earned due to the neighborhoods being sharply divided based on race. This is the result of current and historical discriminatory practices, as discussed later in this presentation. These practices culminate in present-day Chicago, where even from a great distance, segregated neighborhoods are evident. The map below (from the *New York Times*' "Mapping Segregation") shows the racial composition of each neighborhood in Chicago in 2010. This segregation is also tied to major wealth disparities, the effects of which are clearly felt in the Chicago Public Schools (CPS). While the model may show that black students don't perform as well, the reality is that this is the result of long-standing racist policies causing race to be a proxy for income.

To better understand how Chicago schools are affected by race, a linear model was created to predict college enrollment (distance from the mean for the city) as a function of the proportion students in a high school that self-identify as non-white. The model also controls for the effect of attending a charter school. Due to space constraints, the work of verifying the model conditions, and full model outputs have been moved to an appendix below this poster. Below is the fitted model, and a visualization of the data and fitted lines. The coefficient for race has a p-value of 0.00149, which is highly significant.

The coefficient on Percent Not White in this model is -0.70. This means that for a one percent increase in non-white students at a school, we would expect the percentage of graduating students attending college to decrease by 0.7%. While on its face this coefficient feels small, in the wider context it is massively impactful. It means that a school with 40% more non-white students would have a college enrollment rate that is 28% lower. This is huge for understanding segregation in the Chicago Public Schools, as it clearly demonstrates racial disparities in CPS.

The limits of this analysis are numerous, but one major one is using college enrollment as a measure of school quality or success. While using this as a metric of overall success would be problematic, in this circumstance it is justified, as this analysis is specifically addressing the common metrics for success.

The evidence is clear: in Chicago Public Schools, schools with more students of color send fewer students to college. So, how did this happen in the first place? And why has it continued to this day?

Redlining is the term that describes the practice of racial discrimination in housing loans from the Federal Housing Authority (FHA). The FHA drew up maps of neighborhoods that gave areas "security ratings," which were in large part determined by the amount of black people living in an area. Mostly white areas were low security concerns, while mostly black areas were considered dangerous, often highlighted and separated by a red line (hence the term redlining). "Dangerous" areas were not approved for loans, while low concern areas got a large amount of money pumped into them, increasing home ownership and property values in those areas. Additionally, "safe" areas drafted housing covenants, explicitly banning non-white people from owning houses in those areas. A map of these are available to the right.

Chicago is often described as "the birthplace of redlining" (Nelson et al 2023), as Chicago was one of the first places where the FHA applied their criteria. Chicago was also one of the areas where redlining was most effective, as "Chicago was a racially segregated city long before the rise of federal redlining, but redlining, and the practices it institutionalized, reinforced and intensified that segregation and especially the racial inequalities of home equity, housing investment, and education quality" (Nelson et al 2023). The scale of housing discrimination is clear to see in the map of racial covenants on the right.

Redlining directly caused property values (and wealth in the form of home ownership) to be much lower in black neighborhoods, which had the direct effect of causing schools in black neighborhoods to be funded less. This practice is well documented as other scholars have found. "Districts and schools located in D[FHA Dangerous] neighborhoods have less district-level per-pupil total revenues, larger shares of Black and non-White student bodies with less diverse student populations, and worse math and reading scores relative to their more highly rated A, B, and C residential neighborhoods" (Lukes & Cleveland 2021, 5).

The practices of redlining were officially ended by the FHA in 1968, but that did not magically cause segregation to end. Instead, as discussed in *Race: The Power of an Illusion*, the advantages given to white neighborhoods would persist in the form of generational wealth. Specifically, "If you can get a government loan ...and buy a house in an all-white area that then appreciates in value, that then you can pass on to your children, then you're passing on wealth that has all been made more available to you as a consequence of racist policies and practices" (14-15). Because generational wealth (or the lack thereof) reinforces the existing socioeconomic structures, the neighborhoods that had the advantage of FHA loans continue to increase in wealth, while those that did not will continue to have less capital, resulting in lower funded schools. Lower funded schools will also tend to cause lower performing schools, as seen in the model, which is what Sampson describes as, "the poverty trap" (Sampson 2024, 99).

When considering a model such as this one, it is easy (and has been common in the past) to interpret the link between non-white students and lower college enrollment as being caused by laziness, a lack of grit,

or any other indictment of the students themselves. This claim is easily proven wrong in a number of ways.

One way is to add income to the model. When income is added as a variable to this model, suddenly the predictive power of non-white student percentage is lost. That is, income is a much better predictor for college enrollment than race. Additionally, income is highly correlated with race, as found by many researchers (Kochhar & Cillufo 2018) meaning that the first model coefficient for race is a proxy for income more than anything.