

Student Based Budgeting Concentrates Low Budget Schools in Chicago's Black Neighborhoods

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Stephanie Farmer, PhD

*Associate Professor
Sociology
Roosevelt University*

Ashley Baber

*PhD Candidate
Loyola University Chicago*

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EXECUTIVE SUMMARY

This report examines how Chicago Public Schools (CPS) school funding system, Student Based Budgeting, contributes to racial inequality by concentrating the most resource starved schools almost exclusively in Chicago's Black neighborhoods.

Our findings show:

- Low budget schools are concentrated on the South and West Sides of the city while high budget schools are clustered on the North and Southwest Sides.
- Areas with low and high budget school clusters have a similar percentage of school-age population.
- Charter schools overlap where low budget schools are clustered.
- Low budget schools are clustered in Black neighborhoods experiencing distress from low incomes and unaffordable housing.

In order to deliver a high-quality education for all of Chicago's children, CPS should end Student Based Budgeting. CPS central office should fully staff schools and provide wrap-around services.

In 2014, Chicago Public Schools (CPS) adopted a system-wide Student Based Budgeting model for determining individual school budgets. Our report examines the impact of Student Based Budgeting. Our findings show that CPS' putatively color-blind Student Based Budgeting reproduces racial inequality by concentrating low budget public schools almost exclusively in Chicago's Black neighborhoods. The clustering of low budget schools in low-income Black neighborhoods adds another layer of hardship in neighborhoods experiencing distress from depopulation, low incomes, and unaffordable housing.

BACKGROUND

Since the 1990s, the Chicago Board of Education (CBOE) has adopted various reforms to make Chicago Public Schools (CPS) work more like a business than a public good. CBOE's school choice reform of the early 2000s created a marketplace of schools by closing neighborhood public schools to make way for new types of schools, many of which were privatized charter schools. Between 2000 and 2015, CPS closed 125 schools, turned-around 42 schools, and opened 108 new charter schools and 41 new public schools.¹ Nearly 90% of disruptive school actions during this period impacted Black neighborhoods.²

Under its next business-mimicking reform, the Chicago Board of Education changed the way individual schools would be funded from an automatic allocation to a Student Based Budgeting (SBB) model in 2014. The previous model of school funding functioned more like a quota system, where CPS central office provided each school an automatic allocation of teachers, school professionals, and staff positions.³ The cost of these professionals was covered by the central office, and not individual school budgets. This guaranteed that every school would have a baseline of education professionals needed to operate the school.

Under the new Student Based Budgeting model, CBOE ended the automatic allocation. Instead, schools would receive a stipend based on per student headcounts. Central office would continue to cover the cost of the principal, one clerk and one counselor but automatic funding for eight school positions was eliminated. Principals had to use individual school stipends to pay for teacher salaries, educational professionals, and staff positions.

SBB fundamentally remade the approach to funding public schools. SBB is akin to a business model of financing public schools because funds are based on student-consumer demand and travel with the student-consumer to the school of their choice. In contrast to the old public good approach to financing public schools that ensured a baseline of education professionals in each school.

Advocates of SBB claim it is the most equitable way to fund schools. Each child receives the same amount of money regardless of which school she/he attended within CPS. Advocates of SBB claim that it is a more efficient way to fund schools because the central office will no longer waste money on low performing schools that children no longer want to attend. Finally, decentralizing budgeting responsibilities down to principals gives school administrators who are closest to the ground more autonomy to determine the staffing and programmatic priorities (arts, music, foreign language, etc) of individual schools.⁴

Critics of SBB are concerned that it treats every kid the same, regardless of income level. Low-income students have greater needs than their more affluent counterparts, and SBB provides inadequate resources to meet those needs. Critics are also concerned that SBB forces low enrolled schools to cut their programs, enriching classes, teachers and support staff (like counselors, clerks, and assistant principals) to compensate for the loss of monetary support. The diminished learning environment pushes parents to seek out

other school options, and thereby is a backdoor way to eliminate public schools from the competitive school market.⁵

Our research shows that SBB ignores the unevenness of neighborhood distress, which contributes to declining enrollments. Declining school enrollments are not just a result of student-consumers choosing the best school-product. Instead, neighborhood factors external to what happens inside schools can also lead to low enrollments that go on to impact school budgets.

Many lower-income and predominantly Black neighborhoods are experiencing distress caused by: a low wage labor market and poverty; cuts to the public sector (i.e. public housing and school closures); displacement caused by gentrification and growing housing unaffordability; and crime coupled with racially motivated policing. These factors form the context in which approximately 250,000 Black people have moved out of Chicago between 2000 and 2016, according to U.S. Census data.

RESEARCH METHODS

Using Chicago Public Schools we mapped the location of low budget schools and high budget schools across Chicago for the 2016 school year.⁶ We use the Local Moran's I statistic to identify the locations of high and low Student Based Budget values across Chicago. The Local Moran's I statistic takes all the values in the study, in this case all CPS school Student Based Budgets compared to the mean budget amount for all CPS schools (mean = \$2,827,040).⁷ Then, the Local Moran's I compares each individual school value to all the schools in the surrounding geographic location to determine if there is a cluster of high budget schools which are above the mean (High-high) or a cluster of low budget schools which are below the mean (Low-low), or if there are outliers such as low budgets schools surrounded by high

budget schools, or vice versa (Low outlier and High outlier).⁸

Out of the four possible significant outcomes (High-high, Low-low, High outlier and Low outlier), our research focuses on 1) Low-low clusters, where schools with low budgets are surrounded by other schools with low budgets; and 2) High-high clusters, where schools with high budgets are surrounded by other schools with high budgets. We then compare Low and High clusters with census tract data on common indicators of neighborhood distress: median income and rent-cost burden.

FINDING 1: LOW BUDGET SCHOOLS ARE CLUSTERED ON THE SOUTH AND WEST SIDES. HIGH BUDGET SCHOOLS ARE CLUSTERED ON THE NORTH AND SOUTHWEST SIDES

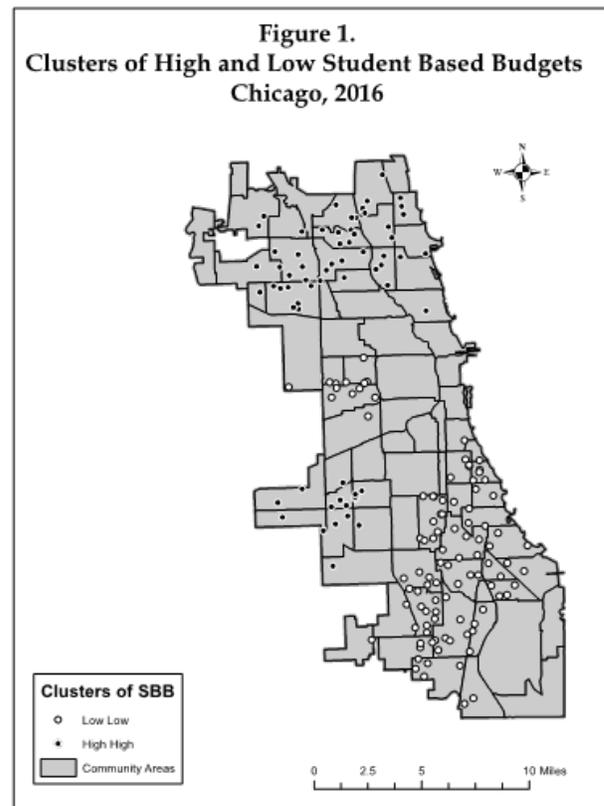


Figure 1 shows the statistically significant clusters of SBB across Chicago. High budget clusters are indicated by black dots and are evident on the

north side and south-west side of the city. Low budget clusters are indicated in white and are evident on the south and west sides of the city. These spatial clustering of points indicate schools which are located near other schools with similar budgets, either high or low, compared to the distribution of budgets across Chicago.

The concentration of high budget schools in Latinx communities makes sense in light of the growth in student population in these neighborhoods (see Figure 3). However, as our next map reveals, student growth is not as robust in White neighborhoods.

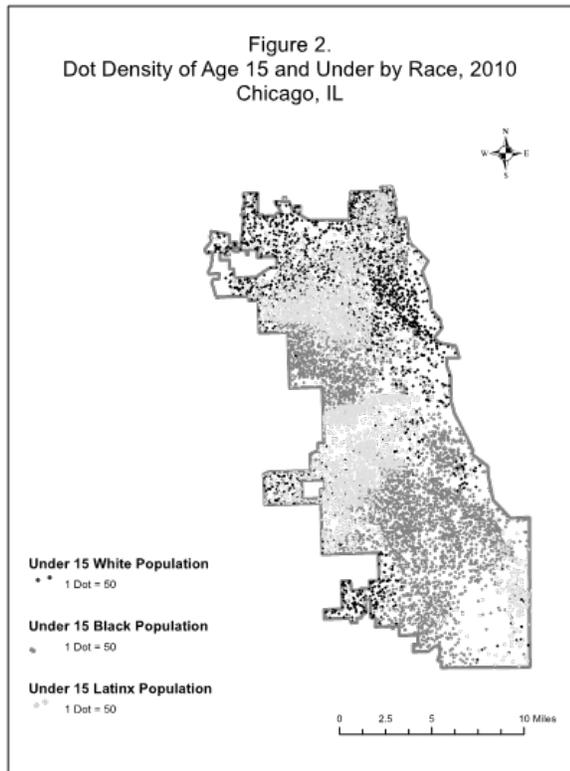
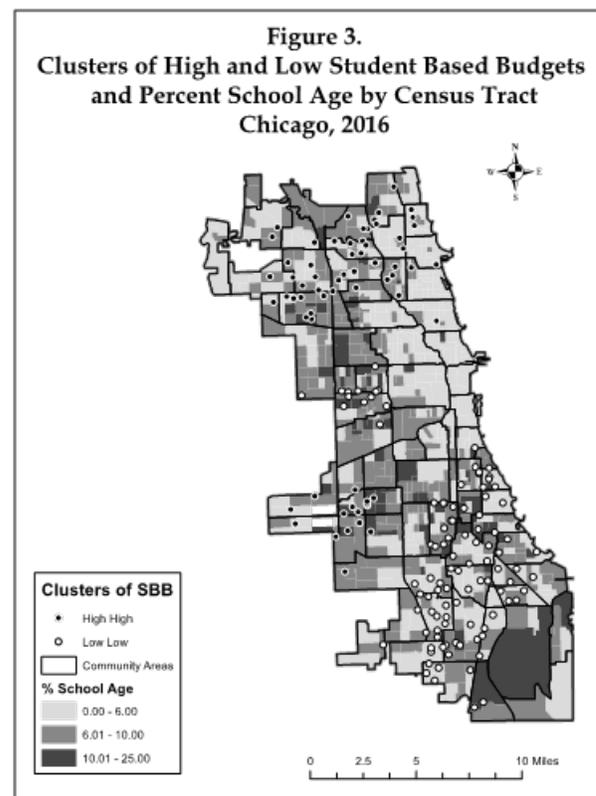


Figure 2 shows the spatial distribution of children under 15 population⁹ by race and ethnicity. Each dot represents 50 children aged 15 and under. Dark grey, black and light grey dots represent Black, White, and Latinx children, respectively. Black school aged populations are concentrated on the south and west sides of the city. Concentrations of Latinx school aged population occur on the northwest and southwest sides of the city. Concentrations of White school aged children are in the central and north areas of Chicago. When comparing Figure 1 and Figure 2, the clusters of low budgets overlap with concentrations of Black school aged population. Comparatively, the clusters of high budgets overlap with the concentrations of White and Latinx neighborhoods.

FINDING 2: AREAS WITH LOW AND HIGH BUDGET CLUSTERS HAVE SIMILAR PERCENTAGE OF SCHOOL-AGE POPULATION.

Since Student Based Budgets are necessarily associated with school-aged population, Figure 3 shows the clusters of Student Based Budgets against the percentage of school-aged children by census tract. The dark grey areas show census tracts that have a higher percentage of school-aged children, medium grey shows tracts that have an average percentage of school-aged children and the lightest grey shows lower than average school aged children compared to the city of Chicago. The dispersion of school-aged children reveals that there are fewer children



under 18 in the central area, and in the north and south sides of the city, where White and Black residents live, respectively.

There is no clear overlap between where children live and where high and low budget schools are clustered. The school-aged percentage for high budget census tracts is just under 7 percent. Low budget tracts have a similar school-aged percentage of about 5.8 percent. Therefore, the unevenness of SBB across the city cannot be simply attributed to changes in school-age population.

FINDING 3: CHARTER SCHOOL LOCATIONS SOMEWHAT OVERLAP WITH LOW BUDGET CLUSTERS.

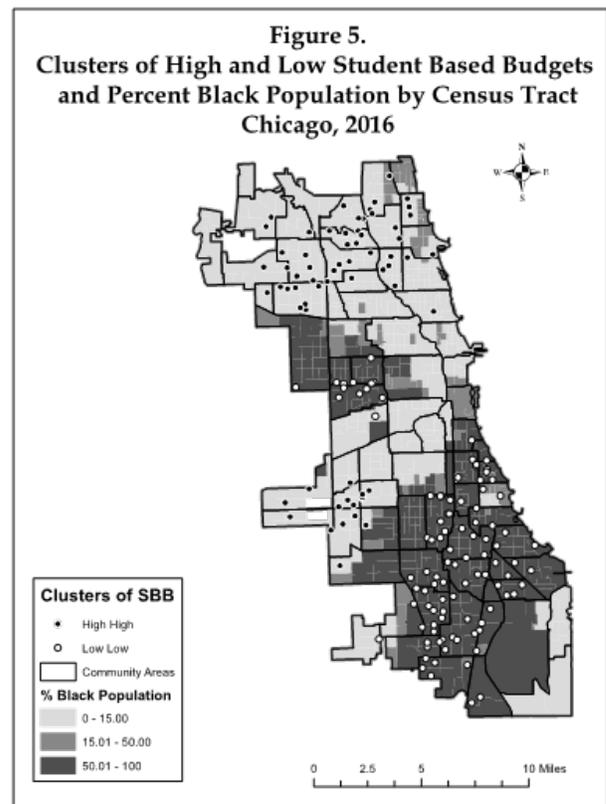
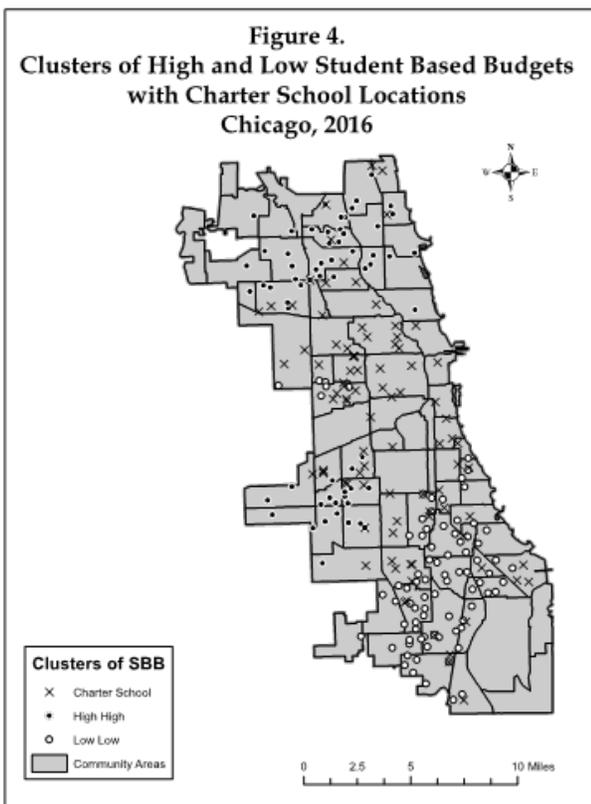
One of the key factors that explain how it is that relatively affluent areas with declining student populations do not have as strong of a concentration of low budget schools as we find in lower-income Black neighborhoods is in part due

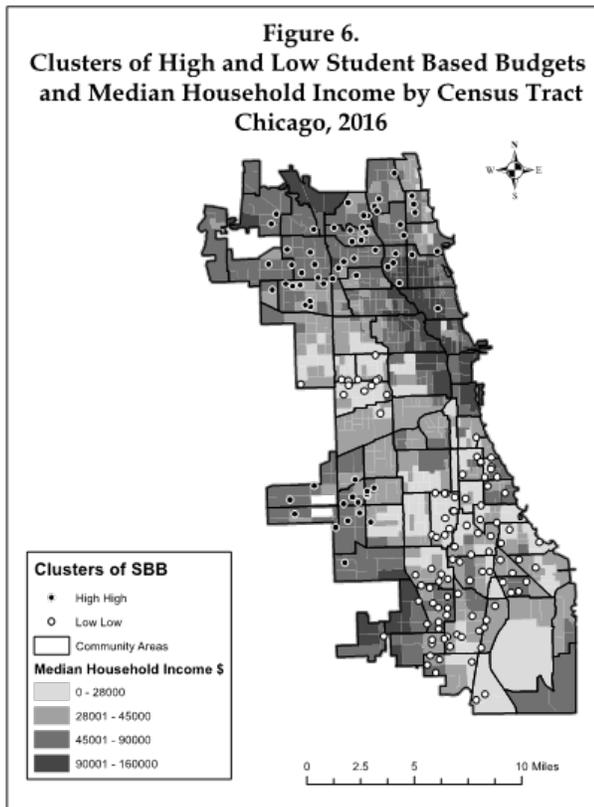
to the proliferation of charter schools in Black neighborhoods.

Figure 4 shows the location of charter schools from 2000 to 2015 compared with where high and low budget schools cluster. The concentration of schools with low budgets is more likely to overlap with the concentration of charter schools on the south side. Figure 4 demonstrates how charter school proliferation interacts with Student Based Budgeting to concentrate low funded schools in Black neighborhoods.

FINDING 4: LOW BUDGET SCHOOLS ARE CLUSTERED IN BLACK NEIGHBORHOODS EXPERIENCING DISTRESS.

Across Chicago, racial segregation overlaps with indicators of neighborhood distress. To examine levels of neighborhood distress compared to SBBs we map median household income and percent rent cost burdened by census tract and compared to racial segregation. Figure 5 shows the percentage Black population mapped with

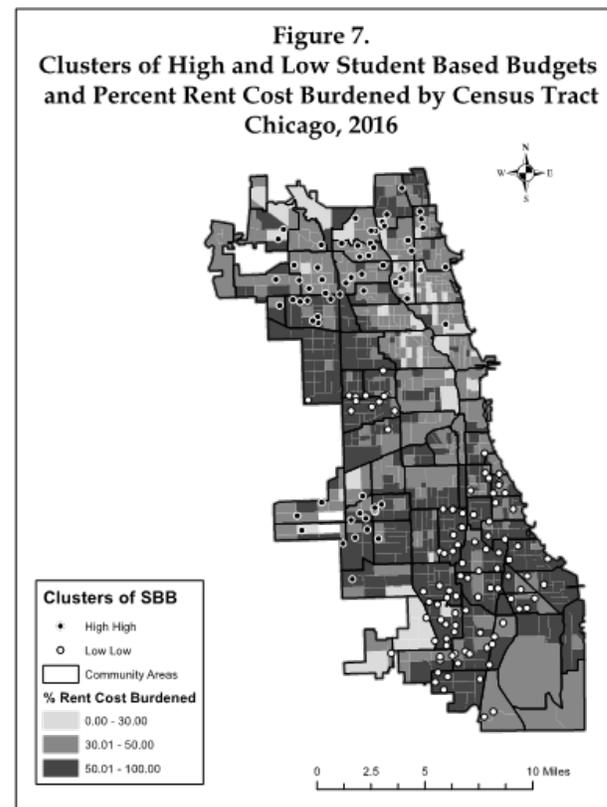




budget clusters. The cluster of schools with low budgets are located in census tracts with a median of 95% Black population. Whereas the census tracts with clusters of high budget schools has a median of 2% black population.

Figure 6 shows the median household income by census tract. The lighter the grey, the lower the median household income for the area. The median household income for census tracts where low budgets are clustered is \$35,089 compared to just over \$55,000 where high budgets are clustered.

Finally, figure 7 shows the percentage rent cost burden (RCB) – households that pay more than 30% of their income toward rent - by census tract. Darker areas show higher rent cost burden, whereas lighter areas show a lower percentage RCB. The pattern here is similar across all three maps showing how neighborhood distress interacts with racial segregation. Low school budgets are clustered in areas with a higher percentage of RCB compared to the high school budget clusters.



Taken together, figures 5, 6 and 7 findings suggest that the areas that have clustering of low school budgets more likely occur in Chicago's disadvantaged neighborhoods. In sum, neighborhoods with clusters of high budget schools have a higher median income of about \$55,000, a lower RCB of about 46% and a low Black population (about 2%). In contrast, neighborhoods with a concentration of low school budgets have a much higher rent cost burden percentage of 57%, a lower median household income of about \$35,000 and are over 95% Black.

CONCLUSION

Starved school budgets due to enrollment based budgeting forces schools in distressed neighborhoods to make hard choices. Instead of giving schools the “freedom to flourish” SBB sets up schools for the “freedom to fail”. Austerity budgets have serious consequences for the daily operation of schools. Classrooms are overcrowded, where there are over 40 students in elementary classrooms, because there is not

enough money in the budget to reduce class size by hiring additional teachers.¹⁰ Small schools are also forced to pare down their curriculum to the bare bones and cut enriching programs like in the arts, foreign languages, and training in professional trades.

Many low budget schools are concentrated in the neighborhoods that also have the highest levels of student mobility rates, where students move from one school to another due to factors like evictions or homelessness.¹¹ Schools with starved budgets are unable to provide institutional supports for these students.

Small schools have more teaching and staff vacancies and high staff turnover, as budgets cuts and disruptions can make schools difficult places to work.¹² Without a teacher in the room, some students are forced to sit idle until their next class period.¹³ Small schools also have a higher percentage of inexperienced teachers, because teachers with more experience receive higher salaries, and are more expensive for low budget schools to hire. Under the previous funding system, teacher salaries were covered by the central office which more evenly distributed experienced teachers across CPS schools relative to the SBB model.

Rather than introducing more funding equity into CPS by treating all students the same without regard to the concrete details in which they live, CPS' putatively color-blind Student Based Budgeting reproduces racial inequality by concentrating the most resource starved schools almost exclusively in Chicago's Black neighborhoods. Making Black families choose between one underfunded school and another underfunded school in their neighborhoods is not a choice. It is the way that racial inequality is reproduced.

SBB is unable to deliver a high-quality education for all of Chicago's children. A public good approach to education is the best way to accomplish education equity for all Chicago's

children. This approach calls for CPS central office to fully staff, provide wrap-around services and hire enough teachers for all schools.

¹ Stephanie Farmer, Ashley Baber and Chris Poulos (2019) "Challenging the Market Logic of School Choice: A Spatial Analysis of Charter School Expansion in Chicago, IL." *Journal of Urban Affairs*.

² Rachel Weber, Stephanie Farmer, and Mary Donoghue. (2018). "Predicting School Closures in an Era of Austerity: The Case of Chicago." *Urban Affairs Review*.

³ Teaching positions were allocated based on one teacher for every 28 students.

⁴ See for example: Roza, Marguerite and Suzanne Simburg. (2013) "Student-Based Allocation to Enable School Choice." Center on Reinventing Public Education. University of Washington. Seattle, WA.; Koteskey, Tyler. (2015, Sept 18). "Student-Based Budgeting has helped Chicago; CPS budget bungling is the real problem." Reason Foundation.

⁵ Lewis, Karen. 2017. "Chicago Teachers Union to school board: Emanuel-approved budget sets stage for mass closings of Black and Latinx schools." October 10. Chicago Teachers Union.

⁶ Of CPS' 661 schools in the 2016, 48 schools were excluded from analysis. 26 of those are alternative schools that have a different budgeting process. The remaining 22 schools were missing data. While we acknowledge that this is a limitation of the data, the school locations were dispersed throughout the city and therefore did not impact the analysis.

⁷ Anselin, Luc. 1995. "Local indicators of spatial association-LISA." *Geographical Analysis*, 27: 93-115.

⁸ Clusters of high-high and low-low budgets are statistically significant with a p value < 0.05

⁹ This data comes from the LTDB database and only has age data by race for 15 and under.

¹⁰ Parents 4 Teachers. Analysis of CPS class size 2018-2019; https://d3n8a8pro7vmtx.cloudfront.net/parents4teachersnet/mailings/1162/attachments/original/Class_size_report_2018_-_2019.pdf?1548209957

¹¹ Matt Masterson. Sept 5, 2019. "Aldermen, Advocates Want City Tax to Support Homeless Students, Families." WTTW. <https://news.wttw.com/2019/09/05/aldermen-advocates-want-city-tax-support-homeless-students-families>

¹² Adeshina Emmanuel. July 30, 2019. "Teacher turnover hits high-poverty schools particularly hard." Chalkbeat. <https://chalkbeat.org/posts/chicago/2019/07/30/teacher-turnover-hits-high-poverty-schools-particularly-hard-heres-how-chicago-plans-to-keep-more-educators/>

¹³ Sarah Karp and Paula Friedrich. Aug 4, 2019. "Does Your CPS School Have Trouble Finding Teachers And Subs?" WBEZ. <https://www.wbez.org/shows/wbez-news/does-your-cps-school-have-trouble-finding-teachers-and-subs/a86b8b8d-e156-4ff9-bdb1-2c777b86b565>