



school board maps

elected representative school board

The federal Voting Rights Act and subsequent litigation motivates the drawing of electoral districts where minority groups have a good chance of electing their preferred candidates.



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The 2023 general election is informative for this purpose. Lori Lightfoot was the strongly favored candidate of African Americans voters and Jesus “Chuy” Garcia was the strongly favored candidate for Latino voters.

Neither candidate received much support from other racial or ethnic groups.



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Using an ecological inference method, we estimate the number of votes by racial and ethnic group for mayoral candidates in the 2023 general elections.

Ecological Inference of Chicago Voters



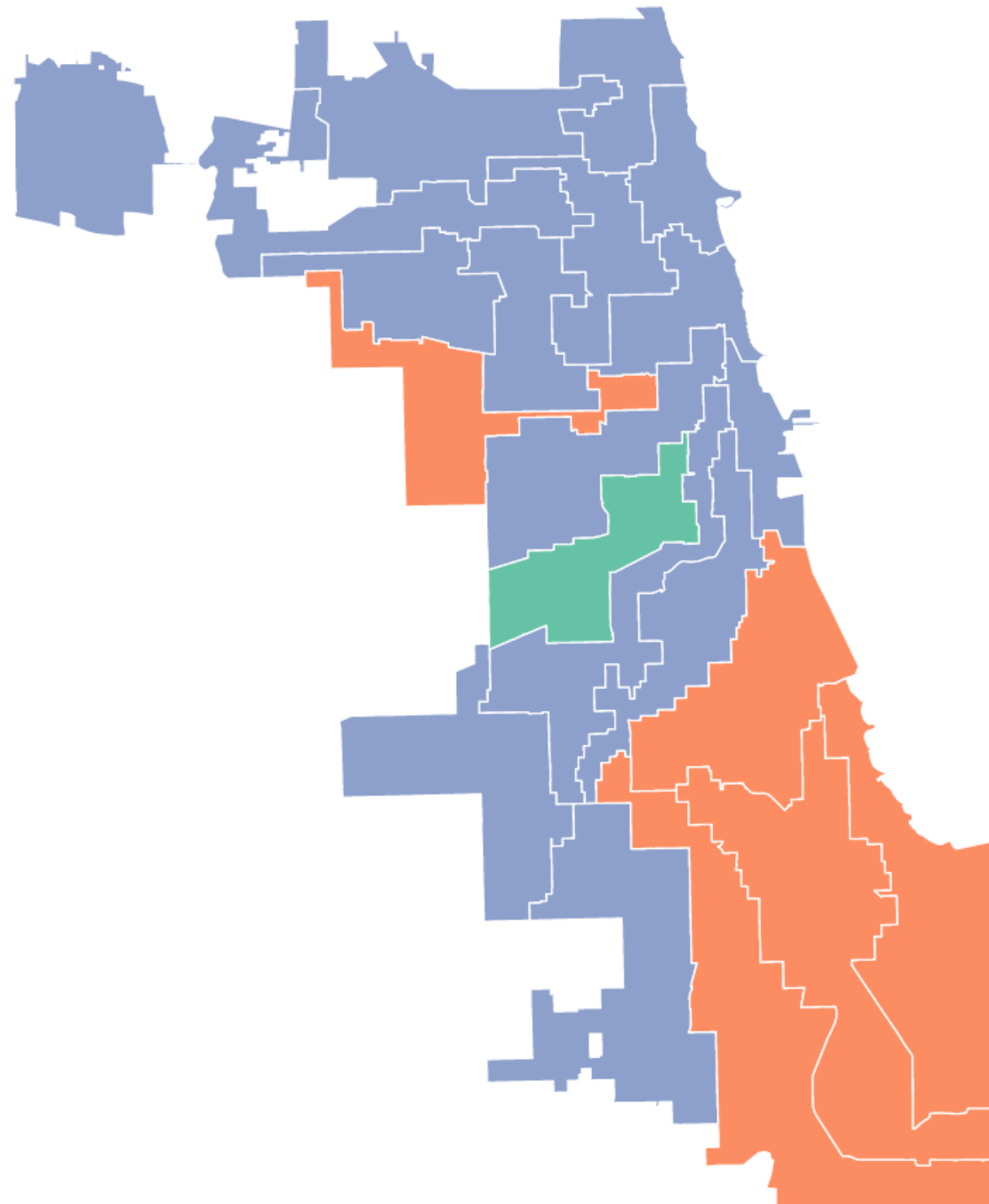
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We will evaluate districting plans on how many districts they contain that would have been effective in electing a minority-preferred candidate.

Concretely, we count the number of districts in which either Lightfoot or Garcia would have received more votes than all other candidates.

Senate and House CPS Board Seat District Plant



Garcia, 1 District

Lightfoot, 5 Districts

Vallas/Johnson, 14 Districts



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If this measure of effectiveness is predictive of electoral outcomes, then white Chicagoans would pick 70% of the board seats, Black Chicagoans would pick 25% of the seats, and Latino Chicagoans would pick 5%.

White people make up 33% of Chicago's population, Black people are 29%, and Latinos are 29%.

Chicago public school students are 11% white, 36% Black, and 47% Latino.



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We wrote a program to try to find plans with the largest number of minority-effective districts. The program was able to find plans with 10 such districts.

These plans would either contain 2 to 4 plans for Latino effective districts (Garcia) and 6 to 8 plans for African American effective districts (Lightfoot).

Finally, we generated a thousand variations of these plans.



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1,000 map variations with 10 minority districts



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Ten minority-effective districts is not enough.

If we, as amateurs, have been able to substantially improve upon the minority-effectiveness of districting for the elected board of the Chicago Public Schools, we hope that the skilled and professional mapmakers of the Illinois legislature can improve minority-representation even more. We urge them to do so.



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data.thefoiabakery.org

<https://www.muckrock.com/organization/the-foia-bakery/>

<https://observablehq.com/collection/@fgregg/cps>

[Chicago Enrollment Data](#)