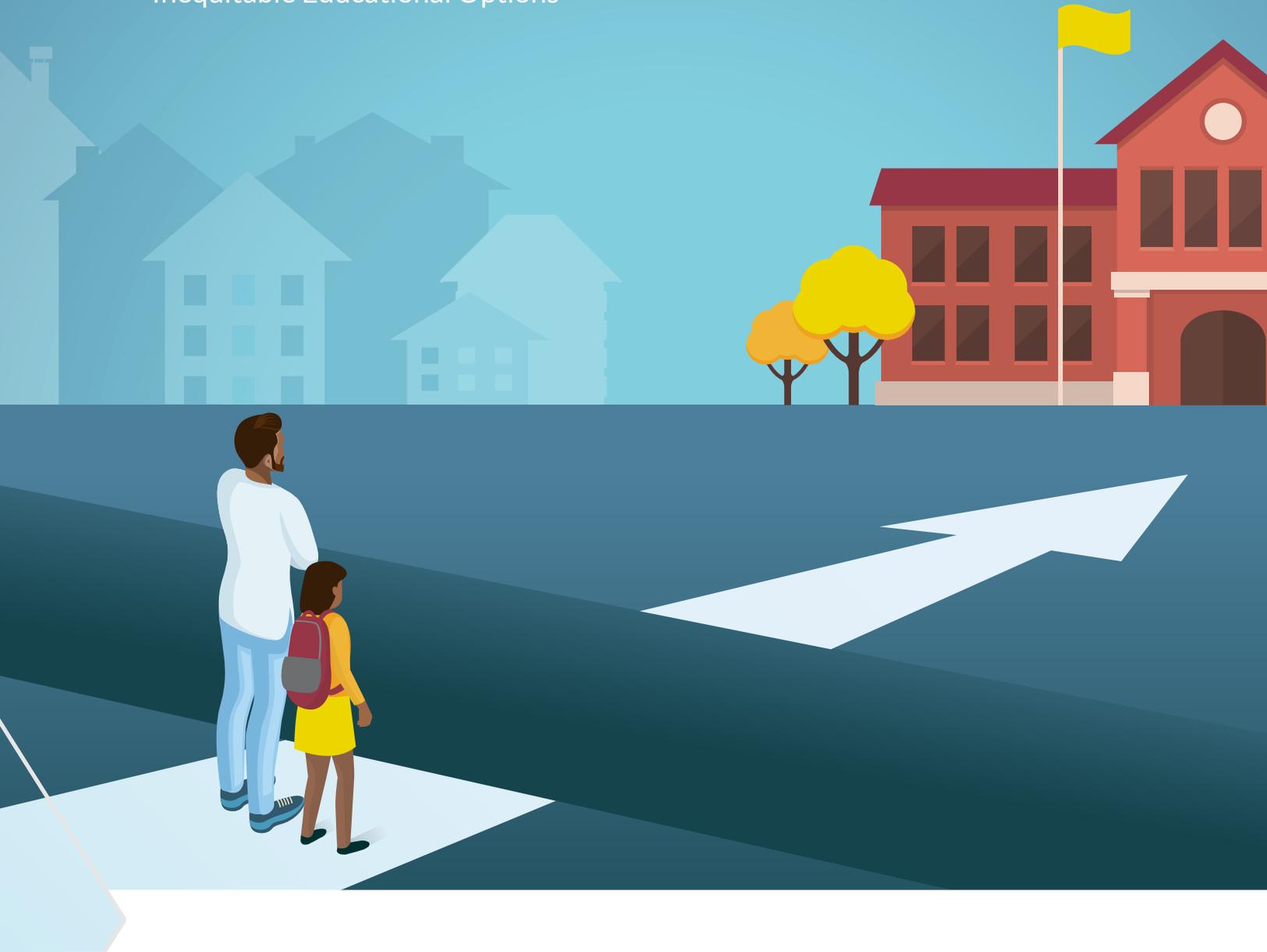# Priced Out of Public Schools

District Lines, Housing Access, and
Inequitable Educational Options

Alex Spurrier, Sara Hodges, and Jennifer O'Neal Schiess
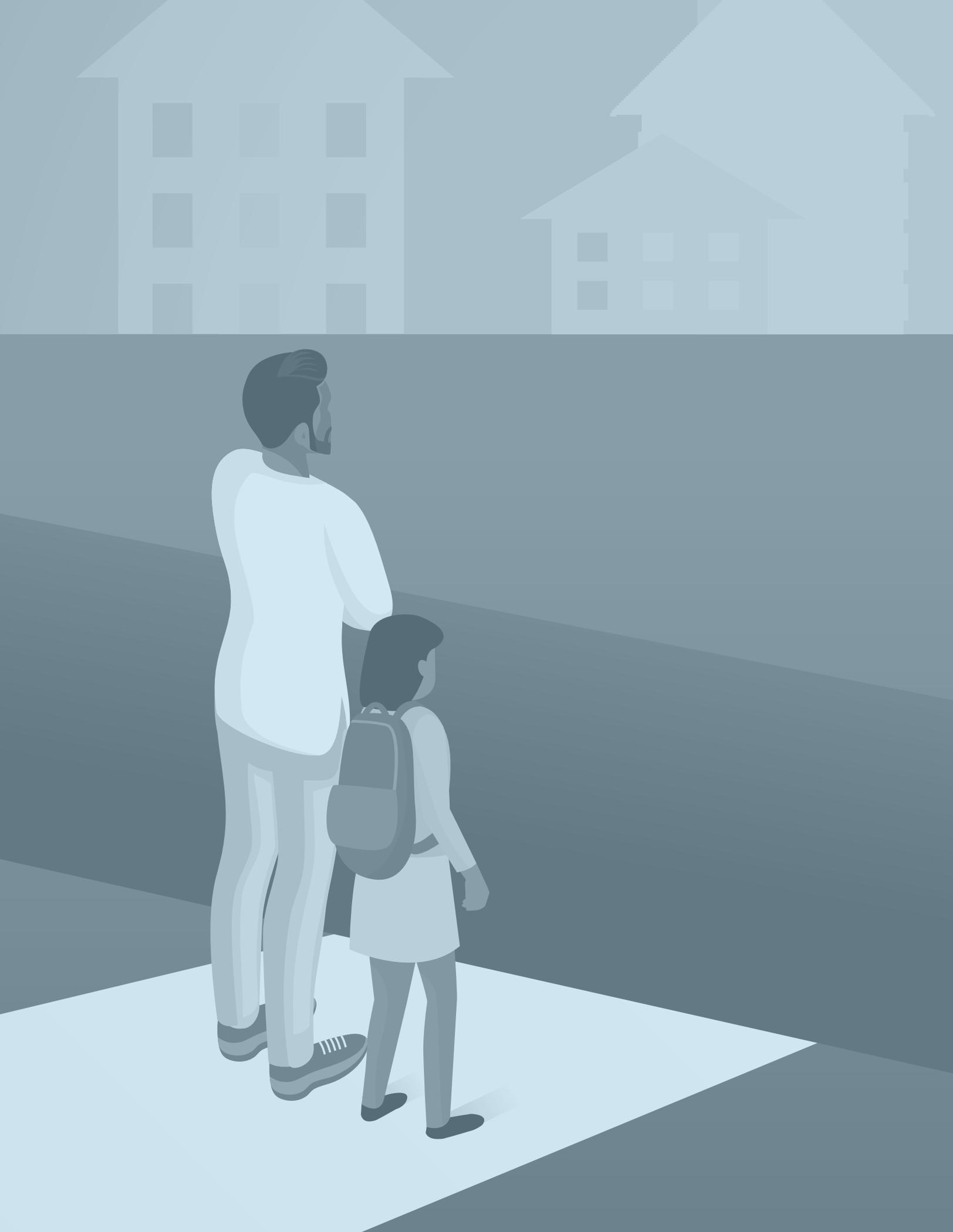
BELLWETHER
EDUCATION PARTNERS

SHORTCHANGED
A Series on Funding Inequity in Schools

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Introduction

Public schools have long been considered a public good in America. We pay taxes that fund tuition-free K-12 schools that accept and educate all students who come through their doors. In exchange, our schools exist to provide every student with an equal opportunity to succeed.

But that ideal is far removed from the lives of millions of schoolchildren.

Public school district doors are not always open to every student in a community. Instead, geographic boundaries of school districts mostly determine who is eligible to attend district schools — limiting access to those who can afford to live within those boundaries. In many cases, district boundaries are barriers blocking low-income families from accessing particular public school systems. If all public schools offered equivalent opportunities or were resourced equitably district to district, these geographic limitations might not matter. But school quality varies district to district, as do the programs offered and the resources available to support students' learning and development.

The combination of two factors — how district boundaries are drawn and where accessible housing is located — often have the effect of clustering lower-income families into some districts and separating more affluent families into others. Despite the efforts of state and federal funding programs designed to equalize opportunity in both education and housing, the districts with a high concentration of low-income housing generate less in school funding from local, state, and federal sources than more affluent districts with inaccessible housing — **an inequitable gap that averages $6,355 in district funding per pupil and affects 12.8 million students across the country.**

Our public school system *should* provide every student with a fair chance to achieve the American dream. However, in far too many communities, the structure of district boundaries and the market for rental housing limit options for our highest-need students while simultaneously providing added advantages for their affluent peers. Unless policymakers address the interrelated problems of school district boundaries and housing affordability, millions of families will continue to find themselves priced out of their preferred public school systems.

This brief examines the relationships among rental housing access, per-pupil funding, and school district boundaries in our country's 200 largest metropolitan areas by exploring three core questions:

- How much access do low-income families have to housing in each public school district?
- What is the relationship between the accessibility of rental housing in school districts and per-pupil funding?
- How do school district boundaries affect low-income families' access to public schooling options within their broader communities?

Geographic restrictions to public school systems are a challenge low-income families face that consistently hinders their access to public education opportunities enjoyed by affluent families. This includes access to well-funded schools, a variety of academic and extracurricular programs, and schools that families view as high-quality — opportunities that vary significantly across district lines.

"Priced Out of Public Schools" focuses on answers to the core questions above related to housing availability and school funding equity. Layering in data on the availability of programmatic offerings across district lines or measures of school quality would answer additional critical questions that were beyond the scope of this analysis; this brief is a starting point. A deeper-dive exploration of available data — one that answers those additional questions, takes a holistic view of the challenges current policy creates for equity and access, and recognizes that access to resources, programs, and quality are all essential pillars of an equitable public education system — is a critical next step.

Access to Rental Housing Means Access to Schools for Low-Income Families

Other than public school choice options that apply to a relatively small proportion of students and communities, such as charter schools or open-enrollment policies that allow students to attend schools across school zone or district boundaries, the vast majority of public school assignments are based solely on students' residential addresses. Communities are divided into school districts, and public school students who live within a given set of boundaries attend schools operated by that district.

It is no secret that moving to specific neighborhoods can grant access to specific public schools, and the perception or reality of school quality and desirability is a driving factor in housing choices for families. Real estate websites like Zillow include data on school assignments in their listings for this very reason, and third-party school rating sites can have a real impact on the price of homes.[1] Families are already voting with their feet in large numbers: One of every five public school students attends their current school because their families moved to gain access to that school.[2]

But the ability to choose a school by selecting a ZIP code is limited to those who can afford it. There are surely many families who would prefer to have their child attend a different public school, but lack the economic power to access housing in preferred school districts. As a result, the limited purchasing power of low-income families in housing markets directly constrains the public educational opportunities their children can access.

Buying a house is an expensive process — the median sale price for homes in 2021 is $374,900.[3] So for lower-income families, access to affordable housing often means access to affordable *rental* housing. Fifty-five percent of families with an annual income below $35,000 live in rental housing — a rate that is more than double that of households with annual incomes above $75,000 (Figure 1). Therefore, access to affordable rental housing within a district often determines the ability of lower-income families to access schools in that district. And a lack of affordable rental housing effectively prices low-income families out of certain schools.

Figure 1 〉 Lower-income Households are More Likely to Rent their Home
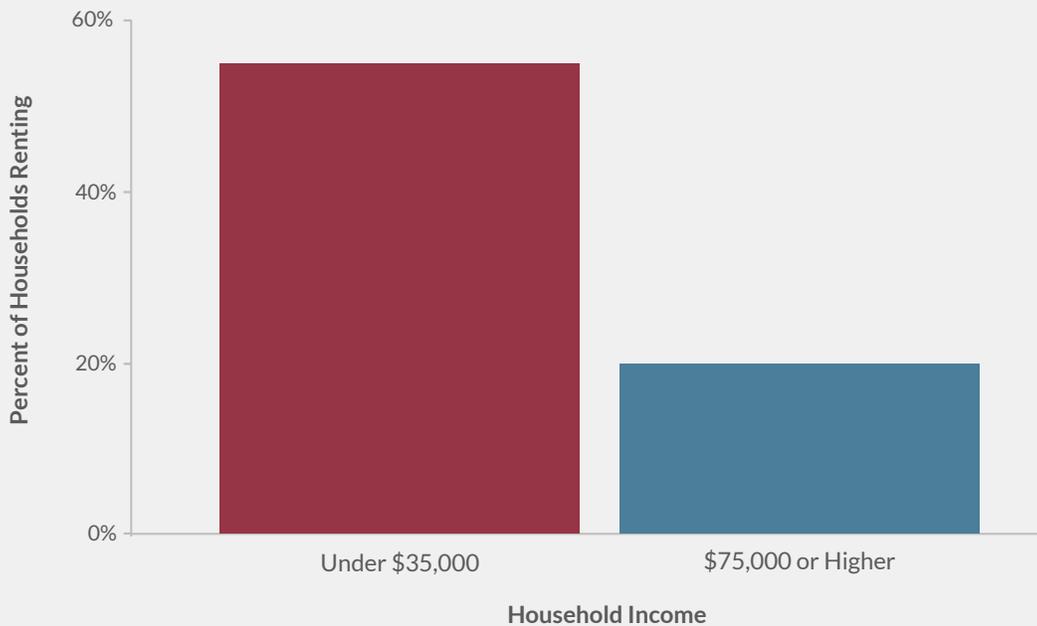
Source: American Community Survey, 5-year estimates (2019)

Assessing the Affordability of Rental Housing in School Districts

How accessible are school districts to families at or below the federal poverty line? Using U.S. Census data, we calculate the percentage of housing units in each school district that a family of four at the poverty line in 2019 — which then stood at $25,750[4] — could afford if they devoted half of their income to rent (which translates to approximately $1,000 per month). We then calculate an **Affordability Index** that compares the percentage of housing units in a district that are affordable rental units to the percentage of families in poverty in a school district's broader community.

Our analysis compares the affordable rental housing in school districts to the poverty rate of the Metropolitan Statistical Area in which they are located. According to the Census Bureau's definition, an MSA includes a dense population center and surrounding areas that have "a high degree of economic and social integration with that core."[5] The interconnectedness within MSAs extends to housing, which is why the Affordability Index uses MSA poverty rates as a comparison point for school district rental housing affordability.
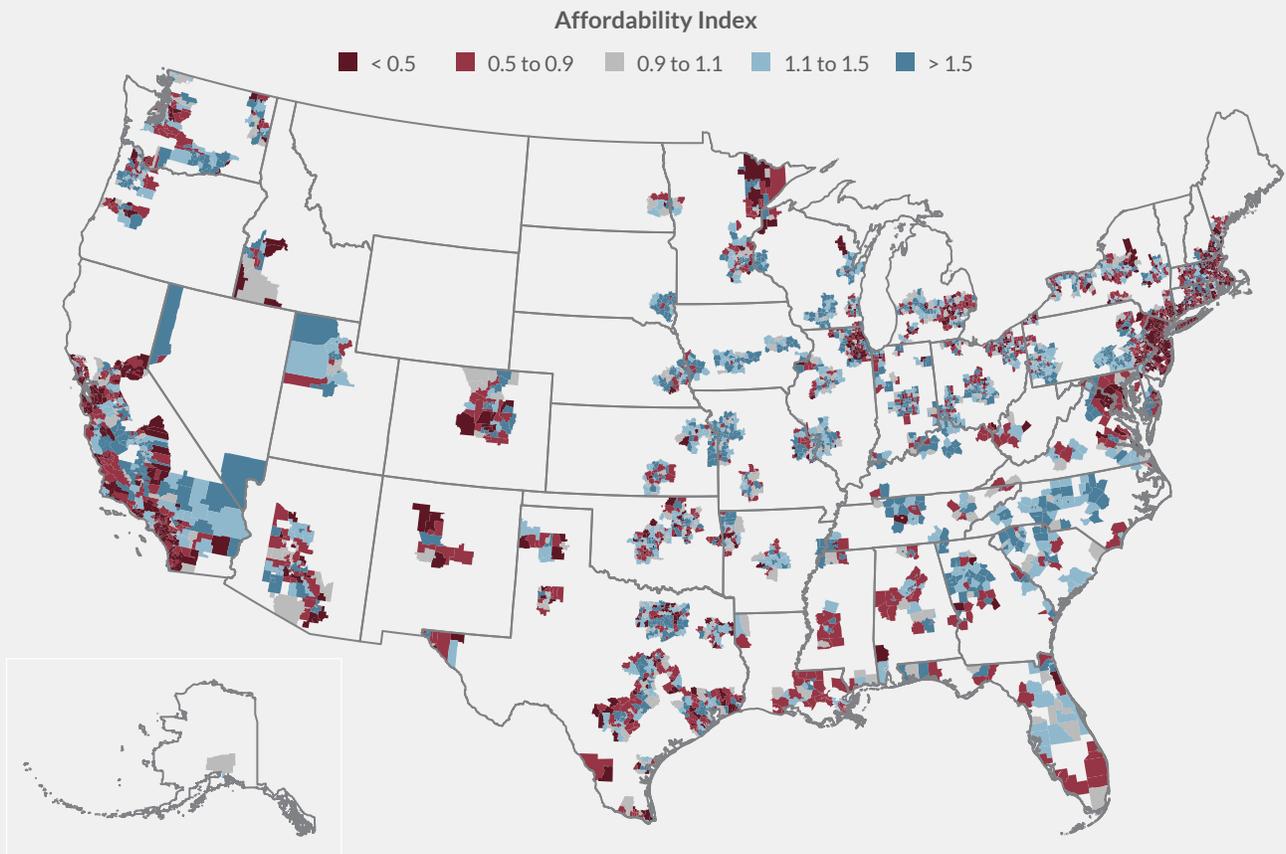
A school district's Affordability Index is a relative measure of rental housing affordability (Table 1). For example, an Affordability Index of "1" indicates that the ratio of affordable rental units inside a school district matches the percentage of households in poverty within the MSA as a whole — meaning the school district meets the housing needs of its broader community. Affordability Index values less than 1 indicate that a school district offers fewer affordable rental units when compared to its MSA's poverty rate and does not meet the housing needs of the broader community. Conversely, Affordability Index values over 1 indicate that a school district is home to a higher concentration of affordable rental units when compared to its MSA's poverty rate. These districts end up bearing more than their share of meeting the broader community's housing needs for low-income families.

Table 1

Affordability Index Categories

Affordability Index	Affordable Rentals vs. MSA Demand	Effect on Low-Income Families
< 0.5	Significantly lower than MSA demand	Extremely inaccessible
0.5 - 0.9	Moderately lower than MSA demand	Moderately inaccessible
0.9 - 1.1	Aligned with MSA demand	Accessible
1.1 - 1.5	Moderately greater than MSA demand	Moderately concentrated low-income housing
> 1.5	Significantly greater than MSA demand	Extremely concentrated low-income housing

The following analysis examines the Affordability Index in school districts in the nation's 200 largest MSAs by population, covering communities that range in size from New York City to Bellingham, Washington. It includes 5,743 school districts serving just under 37 million students, accounting for 73%[6] of the nation's public school students (Figure 2). This analysis does not include districts in Montana, Vermont, or Wyoming — states without one of the nation's 200 largest MSAs — or Hawaii and Washington, D.C., which are each served by a single school district.

Figure 2

Affordability Index for School Districts in the 200 Largest U.S. MSAs by Population

Educational Inequities are Closely Linked to Housing Inequities

Families do not have equal access to public school districts because they do not have equal access to housing in every district. A school district's Affordability Index influences the composition of the community of students it serves in its classrooms. **Districts with inaccessible housing (Affordability Index <= 0.5) serve a much more affluent, lower-poverty population than school districts with highly concentrated low-income housing (Affordability Index >= 1.5).**

Housing affordability is also tightly linked to school funding. The 1,400 districts among the communities we analyzed with inaccessible housing (Affordability Index <= 0.5) and those with concentrated low-income housing (Affordability Index >= 1.5) differ in multiple ways, but the economic differences are stark. School districts with inaccessible housing have an average median household income (MHI) of $108,184, compared to an average MHI of $55,065 in districts with concentrated low-income housing. The average poverty rate in inaccessible districts is 7% – less than half the average 18% poverty rate in districts with concentrated low-income housing.

This translates to significant differences in school funding at the district level. On average, **districts with inaccessible housing generate an additional $4,664 per-pupil when compared to the average per-pupil funding levels for districts in the top 200 MSAs. At the same time, districts with concentrated low-income housing generate an average of $1,691 less per-pupil than the average district in the top 200 MSAs (Table 2).**
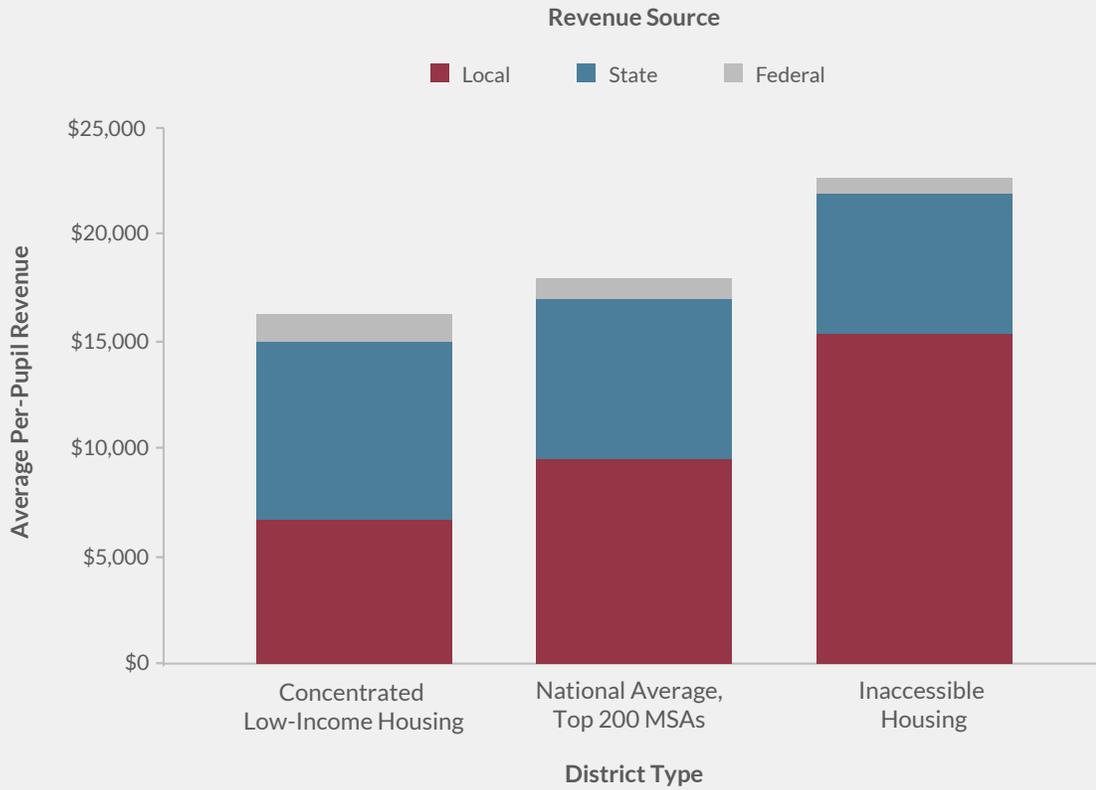
Table 2 Affordability Index Categories

Category	All Districts, 200 Largest MSAs	Affordability Index <= 0.5 Inaccessible Housing	Affordability Index >= 1.5 Concentrated Low-Income Housing
Total Enrolled Students	36.9 million	6.0 million	12.8 million
Number of Districts	5,743	1,400	1,545
Median Household Income	$75,942	$108,184	$55,065
Student Poverty Rate	12%	7%	18%
Average Per-Pupil Revenue	**$17,911**	**$22,575**	**$16,220**

These funding disparities are the direct result of districts' varying capacity to raise local revenue for schools, most commonly through property taxes. More affluent districts with inaccessible housing have much greater capacity to tax property wealth than districts with concentrated low-income housing. **The average local revenue raised in districts with inaccessible rental housing is $8,663 more per pupil — more than double the amount raised by districts with concentrated low-income housing.**

State and federal education funding programs typically provide more money to school districts that serve higher-poverty student populations. This helps reduce the local revenue gap, but only by an average of $2,308 per pupil (Figure 3).

Figure 3

Average School District Per-Pupil Revenue by Source, 200 Largest MSAs by Select Affordability Index Groups

Revenue Source

■ Local ■ State ■ Federal

Average Per-Pupil Revenue

$25,000
$20,000
$15,000
$10,000
$5,000
$0

Concentrated Low-Income Housing | National Average, Top 200 MSAs | Inaccessible Housing

District Type

Educational Gerrymandering: Isolating Poverty and Consolidating Wealth

In some states, district boundary policies combine with uneven housing access to produce stark examples of educational gerrymandering (Figure 4). In these cases, a school district with a disproportionate concentration of low-income housing shares a direct border with a district with little to no accessible rental housing. We call these "barrier borders."
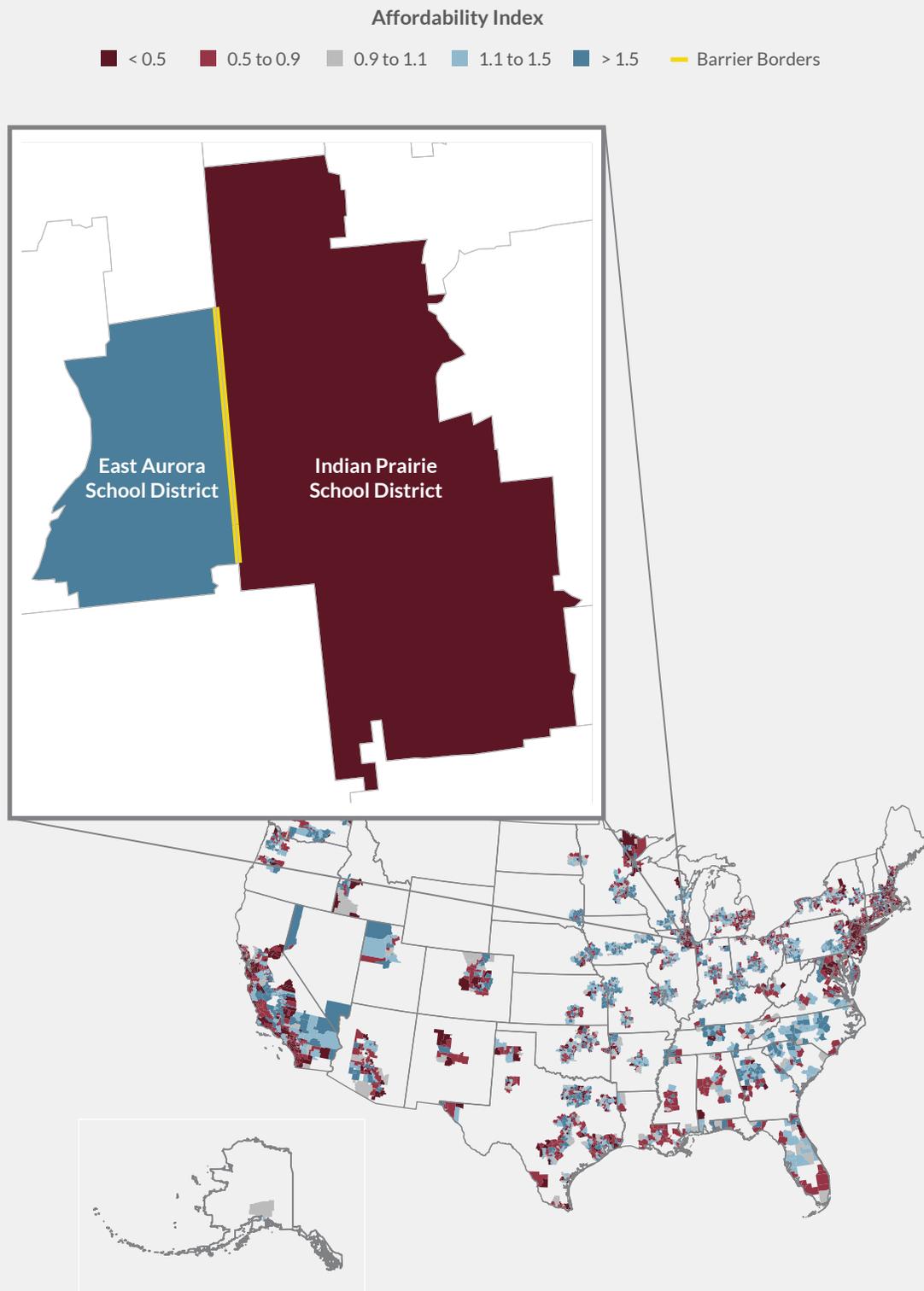
There are a total of 497 barrier borders across the country — school district borders where a district with an Affordability Index of 0.5 or less shares a border with a district with an Affordability Index of 1.5 or greater in the same state (Figure 5).

There are some states with few or no barrier borders between school districts. Most of these states are largely rural and/or Southern. In these states, most district boundaries mirror county lines. While there are some egregious examples of educational gerrymandering in states with few barrier borders, they are the exception and not the rule.

For example, school districts in Alabama, Kentucky, and Tennessee typically serve the populations of entire counties. However, communities within the counties that contain Birmingham, Louisville, and Memphis all adopted additional district boundaries on top of those created by county lines. In each of these cases, additional district boundaries create public school districts that are inaccessible to low-income families.

Figure 4 — Barrier Border Example: East Aurora and Indian Prairie School Districts, Illinois

Affordability Index

■ < 0.5   ■ 0.5 to 0.9   ■ 0.9 to 1.1   ■ 1.1 to 1.5   ■ > 1.5   ▬ Barrier Borders

East Aurora
School District

Indian Prairie
School District

Figure 5 > Barrier Border Totals and Locations by State

Number of Within-State Barrier Borders

■ > 40 ■ 31 to 40 ■ 21 to 30 ■ 11 to 20 ■ 1 to 10

● Barrier border locations shown by gold points
□ States without barrier borders shown in light grey

# More District Lines, More Barrier Borders

There are more than 13,000 school districts in the U.S., but the size and composition of districts vary both across and within states. Some states have relatively few districts serving relatively large student populations, including Florida with 67 county-based school districts educating nearly 3 million students, and Maryland with 24 districts for roughly 900,000 students. In these states, more families will have a better chance to find housing options that fit their budget in the school district of their choice. Students in Hawaii and Washington, D.C. are served by a single school district, so access to educational opportunity is the sole responsibility of their singular education agency.

Unfortunately, many states take a very different approach to drawing school district boundaries. States with many geographically small districts significantly limit opportunities for families to access public school districts while also staying within their housing budget. When neighborhoods within the same community are carved into separate school districts, only families with significant real estate purchasing power truly have access to every public school district in that community.

New York state, for instance, has 682 school districts for its 2.5 million students — 10 times the number of districts as Florida for nearly 300,000 *fewer* students. Texas leads the nation in the number of school districts with more than 1,000, California has more than 900, and Illinois has more than 800. That these states have many school districts is not a problem in and of itself — they serve large geographic areas, so it makes sense to have more districts than a state like Delaware. The problem arises in their urban and suburban areas, which are divided into dozens of small school districts. The MSA of greater Houston is home to 61 school districts. The MSA of greater Chicago has 353 school districts and leads the nation with 45 barrier borders (Figure 6).

Figure 6 > Affordability Index of Public School Districts, Chicago MSA

Affordability Index

■ < 0.5　■ 0.5 to 0.9　■ 0.9 to 1.1　■ 1.1 to 1.5　■ > 1.5　▬ Barrier Borders

Chicago Public
School District
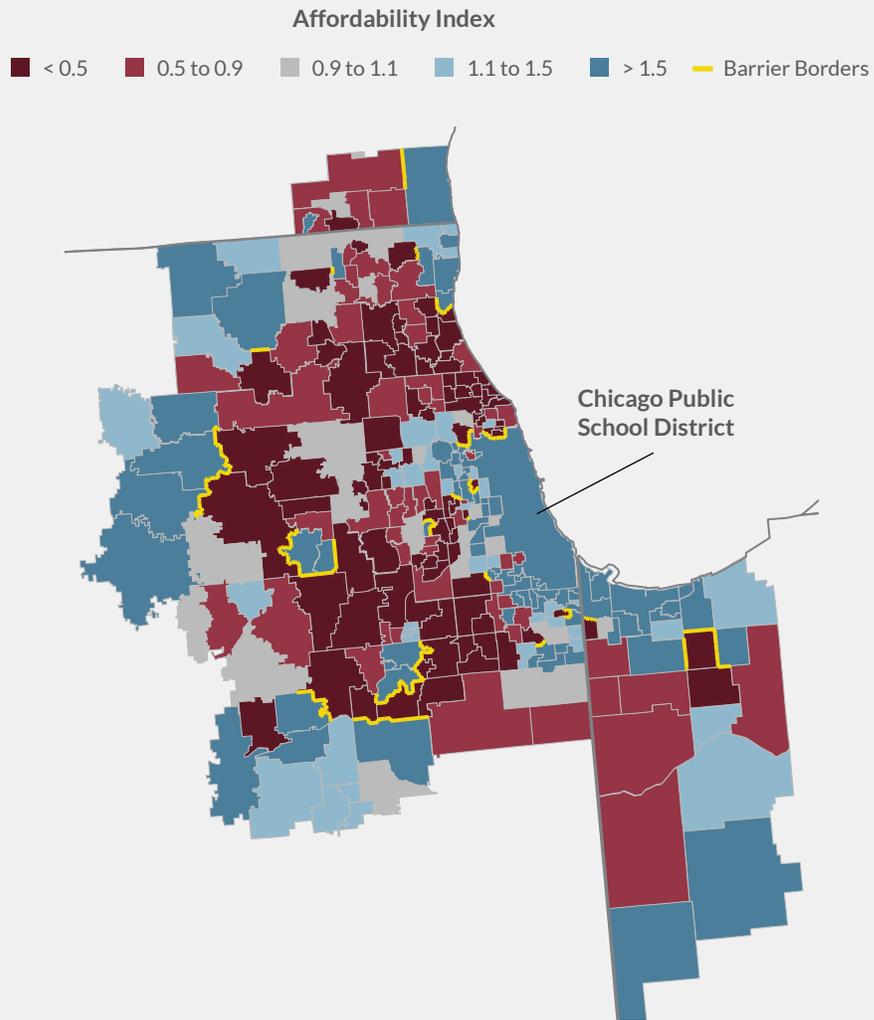
In some cases, it might make logical sense to divide large metropolitan areas into smaller districts based on student population to avoid having mega-districts that enroll an unmanageable number of students. Following that logic, one would expect to see districts of similar size by enrollment. However, that is not the case in many of the country's metropolitan areas, where low-income students tend to be clustered in a small number of larger districts while affluent students are served by smaller, more inaccessible districts.

One example can be found in the five northern New Jersey counties of Bergen, Essex, Hudson, Passaic, and Union, which collectively serve more than 500,000 students in 144 school districts (Figure 7). However, just four districts with an average poverty rate of 25% serve nearly a quarter of all students in these five counties. At the same time, 74 districts in these counties each serve less than 2,000 students with an average poverty rate of just 5%. These smaller districts are among the most inaccessible in the area, with an average Affordability Index of 0.19 — creating small, exclusive public school enclaves.

These states — and many others — are home to extremely fragmented school district boundaries in metropolitan areas. This leaves many families unable to access some public schools within their broader communities because they cannot afford housing in small, affluent districts. This phenomenon is not an immutable characteristic of public school systems — it is the direct result of policy choices that vary significantly between states.

Figure 7 〉 Affordability Index of Public School Districts, Northern New Jersey

Affordability Index

■ < 0.5   ■ 0.5 to 0.9   ■ 0.9 to 1.1   ■ 1.1 to 1.5   ■ > 1.5   — Barrier Borders

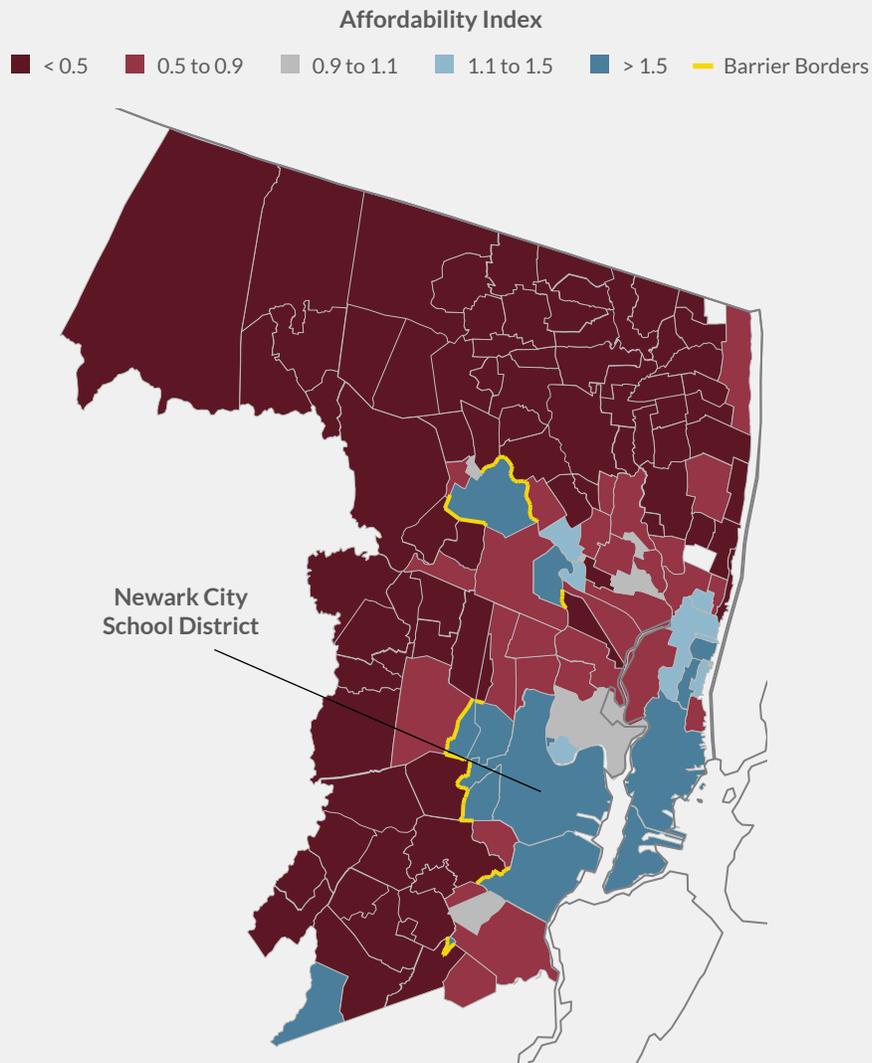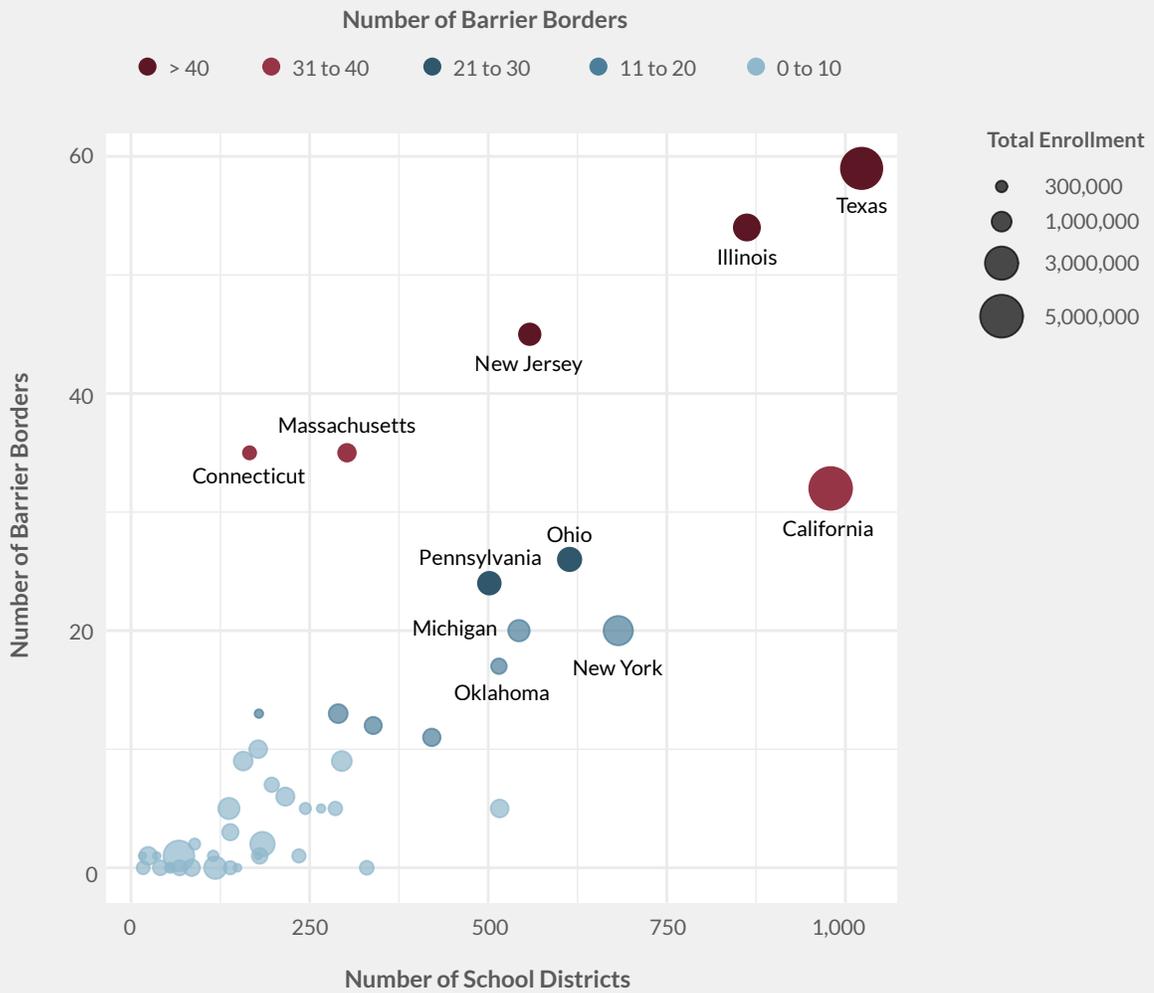**Newark City School District**

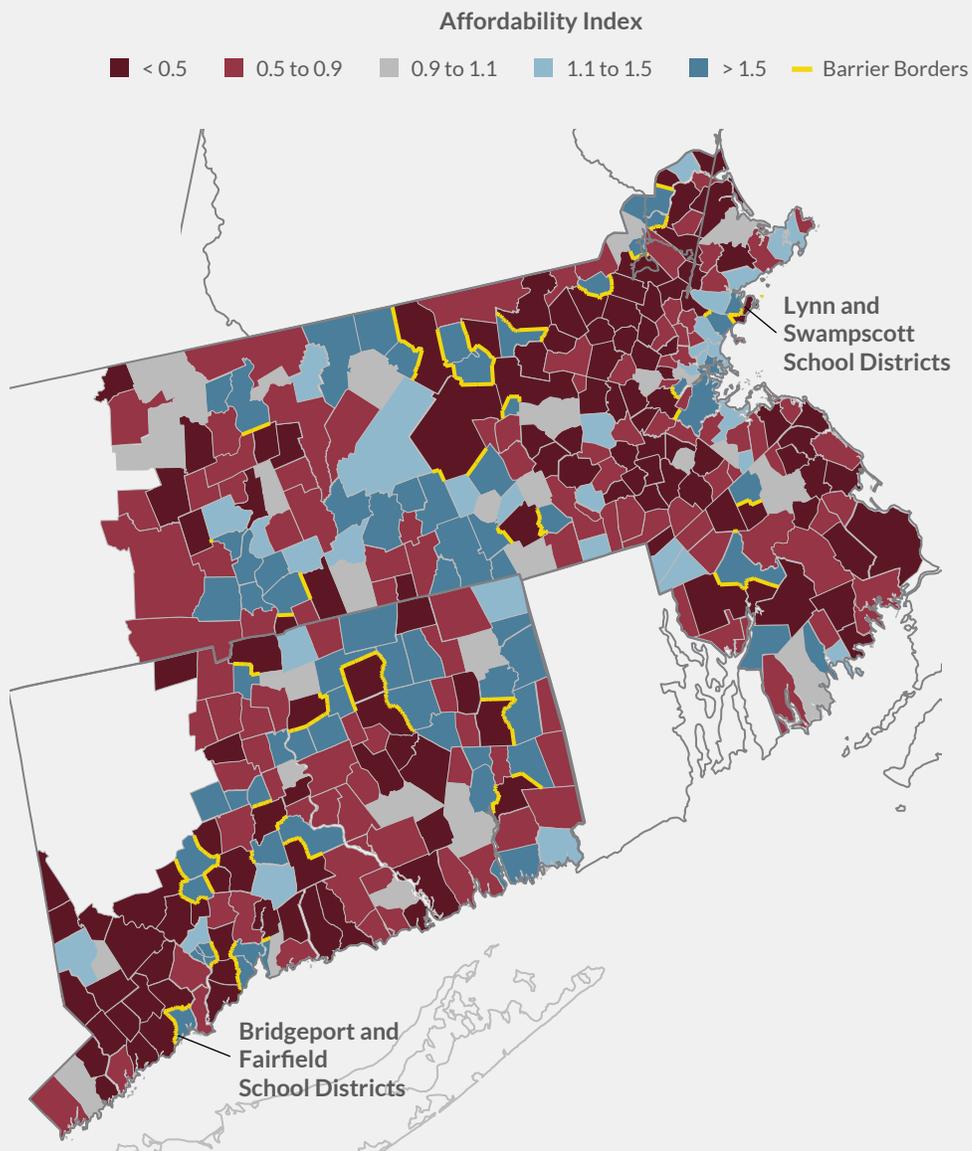**Figure 8** Number of School Districts and Barrier Borders by State

It is no surprise that the states with the highest number of school districts tend to have the greatest number of barrier borders among their districts (Figure 8). **Eight out of the 10 states that account for 70% of the nation's barrier borders also rank in the top 10 for highest number of total school districts.**

Barrier borders also amplify stark contrasts of economic need and school funding disparities. Cincinnati Public Schools in Ohio (Affordability Index: 3.54) is bordered on its northeast side by Indian Hill (Affordability Index: 0.18). The median household income in Cincinnati is only one-third of Indian Hill's income, but the more advantaged students in Indian Hill have an additional $707 per pupil to support their education. In Illinois, the border between North Chicago School District 187 (Affordability Index: 2.55) and Oak Grove School District 68 (Affordability Index: 0.02) separates school districts with dramatically different levels of wealth and school funding. North Chicago's poverty rate (22%) is much greater than Oak Grove's (2%), but students in Oak Grove benefit from an additional $2,799 in per-pupil funding.

Connecticut and Massachusetts — two New England states with school districts that mostly align with town borders — also make the top 10 states with the most barrier borders. Many of the small, affluent towns in these two states engage in exclusionary zoning[7] and fight against the construction of affordable housing,[8] creating stark examples of inequity in neighboring communities (Figure 9). In Massachusetts, Lynn School District has an Affordability Index of 2.29 while neighboring Swampscott's Affordability Index is only 0.36. Swampscott is able to generate $4,997 more per pupil than Lynn. In Connecticut, Fairfield Public Schools have an Affordability Index of only 0.19. Next door, Bridgeport (Affordability Index of 2.97) generates $5,184 less per pupil than Fairfield.

Figure 9 〉 Affordability Index of Top 200 MSA School Districts in Connecticut and Massachusetts

Affordability Index

■ < 0.5 ■ 0.5 to 0.9 ■ 0.9 to 1.1 ■ 1.1 to 1.5 ■ > 1.5 — Barrier Borders

Lynn and Swampscott School Districts

Bridgeport and Fairfield School Districts

Implications for Policymakers

All public schools ought to be accessible by the general public in a community, regardless of family income. However, the combination of inaccessible rental housing and balkanized district borders leaves many low-income families priced out of public schools located nearby.

All public schools ought to be accessible by the general public in a community, regardless of family income. However, the combination of inaccessible rental housing and balkanized district borders leaves many low-income families priced out of public schools located nearby.

But there is hope. These problems were created by public policy, and they can be addressed through five public policy levers:

- State legislatures have a great deal of authority to change how revenue is generated for their public schools. They can consider policy changes to reduce reliance on local funding mechanisms like property taxes, which would weaken the link between real estate prices and the opportunities offered to students in public schools.

- State policymakers also have latitude to redraw and/or consolidate school district boundaries. While _Milliken v. Bradley_ made it clear that the federal government will not force states to address inequities across district lines, there is nothing preventing states from addressing these challenges on their own by changing how district lines are (re)drawn.

- State policymakers can create or expand K-12 schooling options that provide access to families across school district boundaries. This could include open enrollment policies, charter schools, and other school choice programs that expand families' options beyond the borders of the district in which they reside.

- State and local governments can work to increase the supply of affordable rental housing units beyond communities where low-income housing is already concentrated. This could include revising zoning regulations or increasing financial subsidies for affordable housing developments.

- Federal policymakers could exert more control or influence over the location of federally subsidized affordable rental units to reduce their concentration in particular parts of metropolitan areas with higher Affordability Index ratings.

Making every public school district in the country truly accessible to all families in their communities is challenging work — work that does not necessarily guarantee that students receive equitable opportunities *within* public school districts. But we cannot deliver on the promise of providing equal opportunities for students to succeed until we address the problem of families being priced out of public schools.

Methodology

Our analysis begins by defining "affordable" rental housing as any rental units that a family of four at the U.S. federal poverty line could afford with approximately 50% of their pre-tax annual income. The federal poverty line in 2019 was $25,750,[9] which translates to just over $1,000 per month.

Next, we use 5-year American Community Survey data from 2019 to calculate the percentage of housing units in each school district that are rental units with a rent of $1,000 or less. This data set is narrowed to only elementary and unified school districts within the nation's 200 largest MSAs by population.

Each of the districts included in our analysis has an Affordability Index that is calculated by dividing the percent of housing units in that district that qualify as affordable rentals by the MSA's overall poverty rate. For example, if a district's housing stock was 10% affordable rentals and the MSA's overall poverty rate was 5%, that district's Affordability Index would equal 2.

Next, we add district demographic and finance data for the 2018-19 school year to the Affordability Index using the EdBuild R package `edbuildr.`[10] This package's master data set includes district-level data from the U.S. Census, including Small Area Income and Poverty Estimates, and data from the National Center for Education Statistics, including the Annual Survey of School System Finances (F33) and the Common Core of Data. These data sets allow comparisons between such elements as districts' federal poverty rate, median household income, student demographics, and per-pupil revenue by source.

To identify barrier borders, we study each district in the 200 largest MSAs to find every unique permutation of within-state and within-MSA districts with which they share a border. Any pair of these neighboring districts where one district has an Affordability Index of 1.5 or more and the other's Affordability Index is 0.5 or less qualifies as a barrier border. We exclude high school-only school districts from our analysis to eliminate double-counting with the elementary-only districts that serve as feeders to high school-only districts.

Limitations

There are several instances when comparisons of districts with barrier borders should be made carefully, potentially with further investigation into per-pupil revenue. In particular, revenue estimates for elementary-only districts can be misleading if a significant portion of that funding is passed through to high school-only or unified school districts that serve students from elementary districts when they matriculate to high school. The American Community Survey contract rent data set aggregates housing units for each school district to rental price ranges. The rental range that is closest to 50% of the monthly pre-tax income for a family of four at the federal poverty line is rent of $1,000 or less — 47% of the pre-tax income for a family of four at the poverty line.

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About Bellwether Education Partners

Bellwether Education Partners is a national nonprofit focused on dramatically changing education and life outcomes for underserved children. We do this by helping education organizations accelerate their impact and by working to improve policy and practice. Bellwether envisions a world in which race, ethnicity, and income no longer predict opportunities for students, and the American education system affords all individuals the ability to determine their own path and lead a productive and fulfilling life.