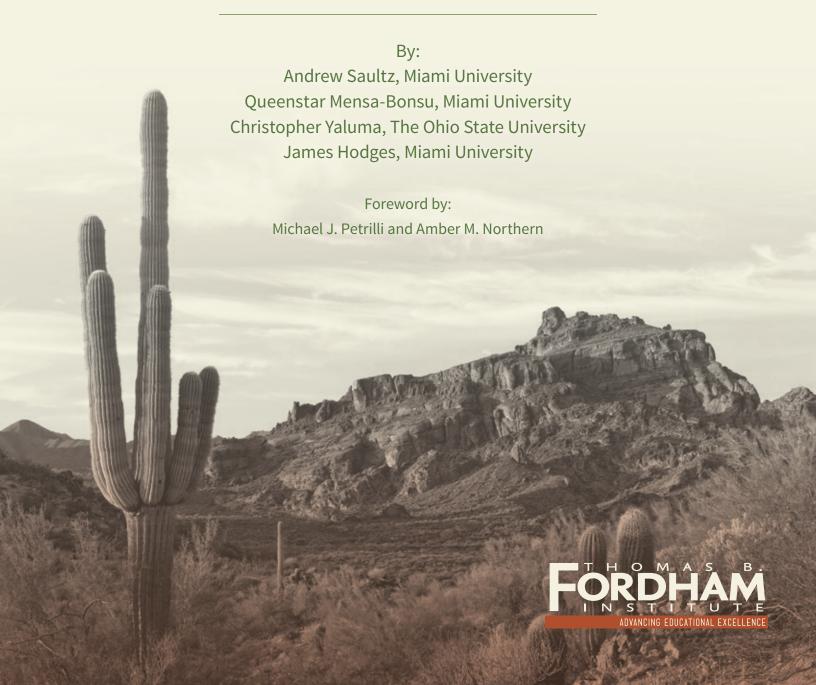
## CHARTER SCHOOL DESERTS:

High-Poverty Neighborhoods with Limited Educational Options





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### FOREWORD AND EXECUTIVE SUMMARY

#### By Michael J. Petrilli and Amber M. Northern

According to the National Alliance for Public Charter Schools, 2016–17 was one of the slowest-growth years for charter schools in recent memory. Whereas the Race to the Top era usually saw an annual net gain of 360–380 more charters, by 2016–17 that increase dropped to roughly 120.¹ Nobody knows for sure why this happened, but one hypothesis is saturation: With charters enjoying market share of over 20 percent in some three dozen cities, perhaps school supply is starting to meet parental demand, making new charters less necessary and harder to launch.² If so, perhaps it's time to look for new frontiers.

One option is to launch more charter schools in affluent communities. This would not only provide opportunities for sector growth, but would also broaden the political base for these schools of choice. Fordham senior visiting fellow Derrell Bradford candidly assessed the risk associated with today's relatively narrow base: "Our [charter sector's] anchor constituency is black and Hispanic families who don't vote in the same numbers or contribute the same dollars as, say, the affluent Nassau County moms who typify the opt-out movement."

We understand the political logic and surely support efforts to expand charters wherever they might satisfy parental demand. But we couldn't help but wonder: Are we overlooking neighborhoods in America that are already home to plenty of poor kids, and contain the population density necessary to make school choice work? Especially communities in the inner-ring suburbs of flourishing cities, which are increasingly becoming magnets for poor and working-class families priced out of gentrifying areas?

This dynamic—labeled the "Great Inversion" by Alan Ehrenhalt, a senior contributing editor for *Governing Magazine*—is familiar to those of us living in Washington and other booming cities. The District of Columbia is home to a thriving, high-quality charter sector that has benefited from

- "Back to School Tallies: Estimated Number of Public Charter Schools & Students, 2011–2012" (Washington, D.C.: National Alliance for Public Charter Schools (NAPCS), December 2011), https://www.publiccharters.org/sites/default/files/migrated/wp-content/ uploads/2014/01/NAPCS-2011-12-New-and-Closed-Charter-Schools\_20111206T125251.pdf; "Back to School Tallies: Estimated Number of Public Charter Schools & Students, 2012–2013" (Washington, D.C.: NAPCS, January 2013); https://www.publiccharters.org/sites/default/ files/migrated/wp-content/uploads/2014/01/NAPCS-2012-13-New-and-Closed-Charter-Schools\_20130114T161322.pdf; "Estimated Public Charter School Enrollment, 2016–17." Washington, D.C.: NAPCS, http://www.publiccharters.org/sites/default/files/migrated/wp-content/ uploads/2017/01/EER\_Report\_V5.pdf.
- 2. Of course, there are other possible explanations for reduced growth too—such as stronger quality control measures, more discerning authorizers, political backlash, and so on.
- 3. D. Bradford, "Bradford The Politics & Partisanship of America's Education Reform Debate: Time for a Suburban Strategy?" *The 74 Million*, April 4, 2018, https://www.the74million.org/article/bradford-the-politics-partisanship-of-americas-education-reform-debate-time-for-a-suburban-strategy/.

supportive public policies and ample private philanthropy. That's all well and good—but the city's affluence has put it out of reach of many poor and working-class families. The District is home to roughly 37,000 poor children and 120 charter schools. Yet neighboring Montgomery County, Maryland, has many more low-income students—some 55,202 of them, a 50 percent increase—and exactly zero charter schools. And in chronically low-performing Prince George's County, Maryland, there are 81,055 low-income students, but just eleven charter schools.

The inner suburbs of Washington, D.C. are awash in poor kids, but they're charter deserts—causing us to wonder whether this is common in other places as well. (Maryland and Virginia, as is well known, have been charter-averse at the political and policy levels.)

As the geography of poverty in America changes, are there many neighborhoods with plenty of population density and lots of disadvantaged kids but few or no charter schools? Or do the schools actually set up shop where poor families live—whether in cities, small towns, or the suburbs?

Those are the questions that this report and its accompanying website address. The report analyzes the distribution of charter elementary schools across the country to provide parents, policymakers, and educators with information about which high- and medium-poverty communities do not have access to charter schools today. These groups can use our findings to better understand the supply of schooling options in their states and cities and perhaps press for changes that would improve that supply. Likewise, charter operators and authorizers will find the data helpful as they consider where to establish new schools.

To conduct the study, we recruited Andrew Saultz, Assistant Professor at Miami University, whose primary area of research is school quality and accountability. Dr. Saultz previously studied factors related to charter openings in New York City, as well as where charter schools are located in Ohio relative to that state's demographics. He was keen to expand the latter study and recruited a trio of talented graduate students, Queenstar Mensa-Bonsu, Christopher Yaluma, and James Hodges, to help with the mammoth task.

Since distance from home is a key factor in families' school selections, particularly at the elementary level, Saultz and his team defined "charter school deserts" as areas of three or more contiguous census tracts with moderate or high poverty and no charter elementary schools. They also show where elementary schools are located relative to census data on poverty, mapping every traditional district and charter elementary school in the country using geographic information system (GIS) software. Their results highlight patterns of charter location for each state and what that means for how these schools are ultimately distributed.

- 4. "DCPS at a Glance: Enrollment," District of Columbia Public Schools, retrieved March 22, 2018, https://dcps.dc.gov/page/dcps-glance-enrollment.
- 5. "Free and Reduced-Price Meal Statistics," Maryland Department of Education, retrieved March 22, 2018, http://www.marylandpublicschools.org/programs/Pages/School-Community-Nutrition/FreeReducedPriceMealStatistics.aspx.
- 6. In some cases, charter school deserts may be identified differently based on how contiguous census tracts are positioned and how the circles that capture the deserts are drawn. In other words, the deserts are best viewed as visual approximations.
- 7. Analysts used school-level data from GreatSchools for 2014–15 since the database lacked information for nine states in the 2015–16 school year; consequently, schools that have opened and closed since 2015 are not present (or absent) in the analysis.

As expected, they find that most charter schools are overwhelmingly located in large metropolitan areas. Yet almost all states with charter school laws also have deserts; specifically, thirty-nine of forty-two charter states have at least one desert each—and the average number of deserts per state is a worrying 10.8 (see Table ES-1).

Table ES-1: The number of charter-school deserts in each state and their approximate locations (2014–15)

STATE	CHARTER SCHOOL DESERTS	CHARTER ELEMENTARY SCHOOLS	APPROXIMATE LOCATIONS
Alaska	1	24	Central Alaska around Fairbanks
Arizona	13	389	Southern/western/eastern parts of the Tucson metro area, southern/eastern/western parts of the Phoenix metro area
Arkansas	12	21	Northeast parts of the state, most of the Little Rock metro area
California	18	874	Northern California, west of Fresno, southeastern portions of the state
Colorado	8	148	Eastern and western parts of the Denver metro area, southern part of the state
Connecticut	8	12	Most of the New Haven metro area, rural areas in central Connecticut
Delaware	3	54	Western and southern parts of the Wilmington metro area
District of Columbia	3	70	Northeast and southern parts of Washington, D.C.
Florida	20	396	Many parts of the Miami metro area, southern/central/ eastern parts of Orlando metro
Georgia	19	92	Western portions of the Atlanta metro area
Hawaii	0	29	None
Idaho	1	41	Northwest part of the Boise metro area
Illinois	14	67	Most of the Chicago metro area
Indiana	13	52	Most of the Indianapolis and Gary metro areas
lowa	0	2	None
Kansas	3	16	Most of the Kansas City and Wichita metro areas
Louisiana	17	113	Southern and eastern parts of the New Orleans metro area, western portion of the Baton Rouge metro area
Maine	4	1	Central and western parts of the state
Maryland	9	34	Most of the Baltimore metro area
Massachusetts	7	96	Boston, Amherst, and Pittsfield metro areas
Michigan	21	488	Most of the Flint, Detroit, and Grand Rapids metro areas
Minnesota	10	196	Most of the Minneapolis and St. Paul metro areas

continued

Table ES-1: The number of charter-school deserts in each state and their approximate locations (2014–15) (continued)

STATE	CHARTER SCHOOL DESERTS	CHARTER ELEMENTARY SCHOOLS	APPROXIMATE LOCATIONS
Mississippi	9	1	Most of the western half of the state, western parts of the Jackson metro area
Missouri	16	48	Central and western parts of the St. Louis metro area, eastern/northern/southern parts of the Kansas City metro area
Nevada	6	39	Central/northwest/northeast parts of the Last Vegas metro area, central/western/northern parts of the Reno metro area
New Hampshire	0	10	None
New Jersey	9	138	Most of the Newark and Jersey City metro areas, and the central part of the Trenton metro area
New Mexico	8	50	Southwest/southeast/central parts of the Albuquerque metro area
New York	21	225	Western/southwestern parts of the Rochester metro area, central and northern parts of the Buffalo metro area, parts of Harlem, the Bronx, and Brooklyn in New York City
North Carolina	14	170	Many areas in the Charlotte metro area, western/eastern parts of the Durham metro area, southwestern and eastern parts of the Raleigh metro area
Ohio	34	360	Northern and western portions of the Cincinnati metro area, southeastern portions of Cleveland, most parts of the Columbus and Dayton metro areas
Oklahoma	15	44	Eastern part of the state, most of the Tulsa metro area, western/southeastern/northern parts of the Oklahoma City metro area
Oregon	5	88	Northern, eastern, and far western parts of the Portland metro area
Pennsylvania	17	373	Many parts of the Philadelphia metro area, western/ central/eastern areas of the Pittsburgh metro area
Rhode Island	3	14	Western/southern parts of the Providence metro area as well as Pawtucket
South Carolina	19	41	Most of the state, large sections of the Charleston metro area
Tennessee	22	38	Central and western parts of the state, western parts of the Nashville metro area, northwest/northeast/ southern portions of the Memphis metro area

continued

Table ES-1: The number of charter-school deserts in each state and their approximate locations (2014–15) (continued)

STATE	CHARTER SCHOOL DESERTS	CHARTER ELEMENTARY SCHOOLS	APPROXIMATE LOCATIONS
Texas	23	510	Western/southwest parts of the state, eastern/ southern/northern parts of the Houston metro area, eastern portions of the Fort Worth metro area, and western/southeastern parts of the Dallas metro area
Utah	6	121	Central portions of the Salt Lake City metro area
Virginia	9	4	Western and southern parts of the state, southern/ central/northern parts of the Richmond metro area
Wisconsin	12	128	Western part of the state, most of the Milwaukee metro area, northern/central/southern parts of the Madison metro area
Wyoming	1	4	Eastern part of state on the border with Nebraska
AVERAGES	10.8	133.8	

Six states have no more than two deserts: Alaska, Hawaii, Idaho, Iowa, New Hampshire, and Wyoming.<sup>8</sup> Yet twelve other states have more than fifteen apiece: California, Florida, Georgia, Louisiana, Michigan, Missouri, New York, Ohio, Pennsylvania, South Carolina, Tennessee, and Texas. Make no mistake, that's a lot of deserts—and particularly surprising in many of the latter states that are home to lots of charter schools.

The number of census tracts that comprise states varies greatly, however, so it's helpful to look also at what proportion of a state's high- to mid-poverty tracts are charter deserts. In seven states, it's more than 30 percent (Alaska, Delaware, Georgia, Mississippi, Nevada, Rhode Island, and South Carolina), but in seven others, it's 10 percent or less (California, Hawaii, Idaho, Indiana, Iowa, Louisiana, and New Hampshire).

To be sure, readers should consider these findings with some caution. They are approximate due to several reasons: the shape or positioning of some contiguous census tracts on a map means that deserts could in fact be "drawn" differently; some areas meet the definition of a charter desert not because they lack charter schools but because they lack inhabitants, meaning they are *literal* deserts, or otherwise barren (for example, central Alaska); and still other areas have few charter schools yet miss the cut-off for high-poverty status. Still, a quick scan of Table ES-1 shows the approximate locations of deserts in each state, and demonstrates that they can appear anywhere. In fact, analysts find that, on average, states have 7.7 charter school deserts in urban areas and 3.1 in rural areas.

<sup>8.</sup> Note that some states, like Iowa and New Hampshire, have very few census tracts with 20 percent or more of their population living at or below the poverty line, thus not meeting our definition of charter school desert—despite the fact that they have very few charter schools. Hawaii is also a special case since its geography does not align well with our method of identifying charter school deserts (its population is distributed across several islands versus "contiguous census tracts").

We draw two key takeaways from these findings.

First, the charter sector needs to move beyond city boundaries. Many poor families are moving—or getting pushed out—to the suburbs. Chalkbeat recently published a piece titled, "As low-income families exit Denver, charter network KIPP is looking to follow." It chronicled how gentrification in Denver is pushing low-income families to the surrounding suburbs, and reported that KIPP is considering following them there. Kimberlee Sia, the CEO of KIPP Colorado, said the network's leaders "believe there is need beyond what is going on in Denver."

The "need beyond" is not unique to Denver. This study documents charter deserts not only in cities, but in inner-ring suburbs and rural areas too, which means that we are palpably failing to locate schools where the greatest need exists. That's not to say that middle class and more affluent families can't or shouldn't benefit from charter schools, nor does it negate the potential benefit to the charter movement of including more such families in our coalition. Our immediate point is simply to urge charter management organizations, other school operators, and philanthropies and organizations that boost, assist, encourage, and study charters to widen their gaze and consider opening schools in places that haven't yet been on their radar but whose residents need more options.

### Second, we must address the policy and practical barriers in some states that keep charter schools from locating where they are needed.

We already noted the challenge of political resistance in the states surrounding Washington, D.C. Recently, Robin Lake and her colleagues at the Center for Reinventing Public Education <u>dug into the barriers</u> that impede charter growth, particularly in the San Francisco Bay Area. The rising cost of doing business, a dearth of school facilities, and funder preference for particular locales were a few obstacles they cited. Yet, when these colossal hurdles collide with the Great Inversion's funneling of low-income urban families into the suburbs, they thwart new charter schools. As Lake et al. explained:

Operators are finding it easy to access philanthropic funding in urban Oakland and San Francisco, but see those places as "over-saturated" and gentrifying. By contrast, in the less urban area of western Contra Costa County, there are more available facilities and a growing population of students that match most charter schools' target populations—but fewer opportunities to access philanthropic dollars to start up new schools.

In short, if needy families and available facilities are increasing in numbers outside the city, so should the number of philanthropists willing to support them there.

<sup>9.</sup> Y. Robles, "As Low-Income Families Exit Denver, Charter Network KIPP is Looking to Follow," Chalkbeat.org, January 22, 2018, https://chalkbeat.org/posts/co/2018/01/22/as-low-income-families-exit-denver-charter-network-kipp-is-looking-to-follow/.

But philanthropists, operators, and educators can't forge new paths alone; they need their policymaking brethren in elected and appointed offices to adopt more supportive school choice policies. The current report provides several examples of states that restrict the number, expansion rate, and/or location of charter schools. Washington State, for instance, allows a total of forty charter schools statewide. Rhode Island permits just thirty-five. And Ohio limits charter openings to districts that the state considers "challenged." Such policies stifle the creation and expansion of new schools in the numerous places that need them. Eliminating such policies should be high on reformers' priority lists.

Our results suggest that some inner-ring suburbs and small towns are prime locales for rekindling charter growth. But that'll only happen if funders, operators, and state and local policymakers expand their horizons. What's the first step? Simple. Read this report and use our <u>interactive map</u> to locate your state, district, and neighborhood. Find the "charter deserts" nearby that contain sizable populations of needy kids who would benefit from the presence of more school options. Then roll up your sleeves and start irrigating.

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<sup>10. &</sup>quot;Are there Caps on the Growth of Charter Schools in this State?" (Washington, D.C.: NAPCS, retrieved October 4, 2017), http://www.publiccharters.org/law-database/caps/.

# INTRODUCTION

A primary purpose of charter schooling is to provide education options and alternatives for families that are neither satisfied with nor well served by their current schooling options. For that reason, many of today's charter schools are focused on improving educational opportunities for low-income and minority students. Their families seek high-quality school options, yet many lack the means to move out of neighborhoods with unsatisfactory schools or to transport their children to attend schools that are better, but farther from home.

School choice policies seek to address this problem in several ways, such as by creating public charter schools. Yet such schools are not evenly distributed across the communities that would benefit from them. For a host of reasons, it's difficult—or impossible—to establish charter schools in many places. There are political, legal, and fiscal obstacles, such as low per-pupil funding for charter students, no access to (or financial help with) suitable facilities, and laws or regulations that confine charters to certain communities or neighborhoods. Yet for a school to serve the children who need and would welcome it—particularly children from poor families—that school must be close to home. This is particularly true of elementary schools, as parents are understandably hesitant to send young children long distances to attend school.

This report examines patterns of charter school locations, seeking to answer one fundamental question: What high-need areas lack charter schools? We analyze the distribution of chartered elementary schools across the country to provide educators and policymakers with information about which needy communities have no ready access to charter schools.

Since distance from home is a key factor in school selection, we define "charter school deserts" as areas of three or more contiguous census tracts with moderate or high poverty but no charter elementary schools. We display these deserts visually, mapping the location of every charter elementary school across the country using geographic information system (GIS) software. We also present this information at the state level, highlighting patterns of charter location—and "non-location"—in every state.

Policymakers can use this information to better understand the adequacy and equity of schooling options in their cities and states. An interactive map associated with this report allows users close-up views of the school location data presented here: www.edexcellence.net/charter-school-deserts. Users can view population and poverty details for any census tract in the United States; filter results by public, charter, or both types of schools; and view a particular school's enrollment, demographics, and percent proficiency in math and English language arts.

# BACKGROUND

Common sense suggests that new schools should and will emerge in places where parental satisfaction with existing options is low and the demand for alternatives is high. Yet research and experience over the past twenty-five years reveal the shortcomings of that notion, as low satisfaction and high demand are just two of the factors that charter operators consider when deciding where to locate a new school. A recent study in New York City found, for instance, that charter schools choose their location in response to poor student achievement, especially in math, and possibly in response to poverty density—but not to parental satisfaction or dissatisfaction per se.<sup>11</sup>

Other research has shown that charter location is tied to demographics. A 2009 study showed that charter schools in the District of Columbia cluster in predominantly African American neighborhoods, and in those with poor (but not the poorest) citizens. Additional studies echo this finding, revealing that charters tend to locate in high-poverty areas and that the percentage of low-income students (i.e., children eligible for free or reduced-price lunches) is correlated with charter location. That said, many states and municipalities permit charter schools to open only in underserved communities or low-achieving districts, so it's not surprising they're often found there—not to mention that many charter operators are motivated to serve such communities.

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Although the physical location of a school is a key determinant of enrollment, simply placing it in a high-need city or district is not enough to make it truly "accessible" to the families it intends to serve. Geographic proximity can be misleading when roads or bus routes require students to travel much

- 11. Andrew Saultz et al., "Exploring the Supply Side: Factors Related to Charter School Openings in NYC," *Journal of School Choice: International Research and Reform* 9, no. 3 (August 2015), http://www.tandfonline.com/doi/abs/10.1080/15582159.2015.1028829?journalCode=wjsc20#.Vedd9J1VhBc.
- 12. C. Lubienski et al., "School Choice and Competitive Incentives: Mapping the Distribution of Educational Opportunities across Local Education Markets," *American Journal of Education* 115, no. 4 (2009), 601–647, http://www.journals.uchicago.edu/doi abs/10.1086/599778?journalCode=aje; C. Gulosino and C. Lubienski, "School's Strategic Responses to Competition in Segregated Urban Areas: Patterns in School Locations in Metropolitan Detroit," *Education Policy Analysis Archives* 19 (2011), https://experts.illinois.edu/en/publications/schools-strategic-responses-to-competition-in-segregated-urban-ar.
- 13. D. Monger, "Charter School Location Choices and Community Characteristics: Evidence from North Carolina," Thesis for Masters in Public Policy (Durham, NC: Duke University, 2012), https://dukespace.lib.duke.edu/dspace/bitstream/handle/10161/6662/NC%20Charter%20 School%20Location%20Master%27s%20Project.pdf?sequence=1; J. Witte et al., "Going Charter? A Study of School District Competition in Wisconsin," *Peabody Journal of Education* 82, no. 2/3 (2007), 410–439, https://www.jstor.org/stable/25594750?seq=1#page\_scan\_tab\_contents; A. Saultz and C. Yaluma, "Equal Access? Analyzing Charter Location Relative to Demographics in Ohio," *Journal of School Choice* 11, no. 3 (2017), 1–19, http://www.tandfonline.com/doi/abs/10.1080/15582159.2017.1345239?journalCode=wjsc20.
- 14. For example, Ohio's charter school law only allows new charters in low-performing districts. See L. McKenna, "Why Don't Suburbanites Want Charter Schools?" *The Atlantic*, October 1, 2015, https://www.theatlantic.com/education/archive/2015/10/why-dont-suburbanites-want-charter-schools/408307/.

farther than the crow flies. Moreover, families living near district boundaries may be barred from a nearby—and preferred—school because enrollment is restricted to district residents. Nor can transportation obstacles be overstated, as they can be major challenges for parents. In a survey of parents in eight cities, the Center for Reinventing Public Education found more than one-quarter citing transportation (or the lack thereof) as a barrier to school choice. And just nine of thirty cities in a 2015 study provided the same transportation to public schools of choice that they offer to traditional district schools.

To determine whether charter schools are truly carrying out the fundamental mission of providing education options to the children who need them most, it's essential to know exactly where they are (and are not) located. This project helps to fill that information void by mapping the country's elementary charter schools and analyzing where they are and whom they serve.

...[L]ow satisfaction and high demand are just two of the factors that charter operators consider when deciding where to locate a new school.



- 15. M. DeArmond et al., "Making School Choice Work" (Seattle, WA: Center for Reinventing Public Education, July 2014), http://files.eric.ed.gov/fulltext/ED546755.pdf.
- 16. P. Wohlstetter, D. Zeehandelaar, and D. Griffith, "America's Best (and Worst) Cities for School Choice" (Washington, D.C.: Thomas B. Fordham Institute, December 2015), https://edexcellence.net/publications/americas-best-and-worst-cities-for-school-choice-0.

## DATA AND METHODS

Based on data from the U.S. Census Bureau and the widely respected school rating organization GreatSchools, we use geographic information system (GIS) software to display the locations of charter elementary schools and the percentage of residents below the poverty line for each census tract in the United States. Then we visually identify ("eyeball") locations where three or more contiguous census tracts with mid- to high-level poverty lack charter schools. We indicate these "charter school deserts" with circles on the maps in the state profiles that follow.

The GreatSchools database supplies the physical address of all elementary charter schools (defined as those having *any grade* in the kindergarten through fifth-grade range.)<sup>17</sup> To improve accuracy, we cross-referenced that list of schools with the charter database maintained by the Center for Education Reform.<sup>18</sup>

School-level data from GreatSchools were downloaded in March 2017 and we include in the sample all elementary traditional public and charter schools. Our report may consequently include schools that have closed and/or exclude new schools that may have opened prior to and following the download.

We focus on elementary schools because families with young children are most likely to pay close attention to school locations. This is true both because parents are likely to be less comfortable sending young children long distances and because curricula and school design vary less at the elementary level than in the upper grades—meaning that school location is even more determinative.<sup>19</sup>

#### **Census Data**

To identify high-poverty areas, we use 2010 Census tract-level data, downloaded from the U.S. Census Bureau's website. Census tracts are small geographic subdivisions that roughly approximate urban neighborhoods, typically populated by 2,500 to 8,000 people. (The Census Bureau target is 4,000 individuals.)<sup>20</sup>

- 17. While the vast majority of these schools have grade ranges typical of elementary schools (roughly kindergarten through fifth grade), schools have many grade configurations, and some atypical schools are included because they include at least one grade in the elementary range. An example is Gilbert A. Dater High School in Cincinnati, Ohio—which, according to the GreatSchools database, includes students in fifth grade and is thus included in our data. Such schools comprise roughly 1 percent of the school sample. Virtual charter schools are included based on their address in the GreatSchools database, but these schools are excluded from the online interactive map.
- 18. "Find a Charter School," (Washington, D.C.: Center for Education Reform), https://www.edreform.com/in-the-states/know-your-choices/find-a-charter-school/.
- 19. See P. Teske et al., "Opening Doors: How Low-Income Parents Search for the Right School" (Seattle, WA: Center on Reinventing Public Education, January 2007), https://www.crpe.org/sites/default/files/pub\_crpe\_open\_jan07\_0.pdf.
- 20. "Geographic Terms and Concepts: Census Tract," (Washington, D.C.: U.S. Census Bureau, 2017), https://www.census.gov/geo/reference/gtc/gtc\_ct.html.

We categorize a tract as a mid-level poverty area if 20 percent to 40 percent of the population lives at or below the poverty line, and a high-level poverty area if 40 percent or more do.<sup>21</sup>

After plotting school locations and poverty on a map by census tract, we visually identify charter school deserts—places where at least three contiguous census tracts display at least 20 percent poverty and no charter schools.<sup>22</sup> We indicate these areas with circles on the state and city maps that follow in the state profiles. Although defining a "charter school desert" this way is arbitrary, it approximates three contiguous neighborhoods, which is both intuitive and practical for families seeking school choices.

#### **Limitations**

Readers should keep in mind several limitations as they read and engage online with our findings. First, we do not account for differences in state policy. Our purpose is not to describe, analyze, or infer how state policies may impact our results, but to show which high-poverty areas lack charter schools, regardless of underlying causes or context. While we hope that this analysis stimulates discussion about why charters do not exist in some places that would likely benefit from them, it is beyond our present scope to argue the merits of policies that may impact that absence.<sup>23</sup>

Second, although we focus on school locations, this factor alone is insufficient to ensure that families have viable access to schools. Proximity is simply a proxy for access. Nearby schools may not be available to families if they're filled to capacity, and transportation may remain problematic, even to schools that are relatively close to home.<sup>24</sup> Additionally, charters sometimes limit enrollment to children who reside in particular school districts or within other boundaries, meaning that proximity does not necessarily confer the right to enroll.

Third, although most census tracts are of similar population, some of the areas we define as charter school deserts may be very thinly populated and lack enough families to support a competitive school choice market. In these areas, virtual schools may be of service to families who must otherwise travel long distances to school.

Fourth, our report does not address school quality, either of charter schools or traditional public schools. If an area has a charter school, the area will not be considered a charter school desert, regardless of school quality. The companion website, however, allows users to view schools' math and English language arts proficiency data.

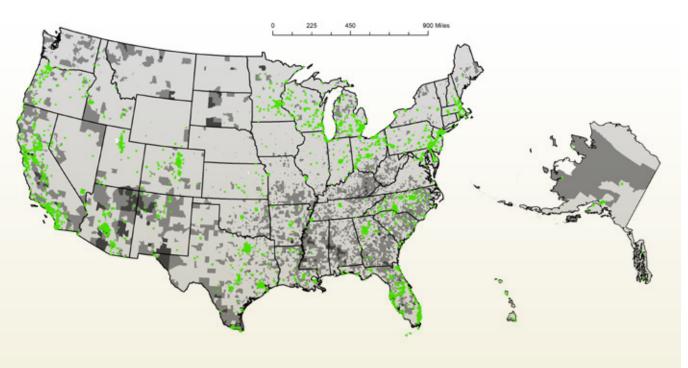
Finally, *visually* identifying charter school deserts (as opposed to using an automated algorithm) is obviously subject to human error. In some cases, charter school deserts may themselves be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn. In other words, the deserts are best viewed as visual approximations. Readers seeking more precise location data should visit the accompanying interactive map found at www.edexcellence.net/charter-school-deserts. There they can clearly identify charter school deserts in their own communities.

- 21. This is consistent with previous research that characterizes an area with greater than 40 percent of the population living below the poverty line as having "concentrated poverty." See, for instance, Kneebone, Elizabeth, and N. Holmes. "Concentrated Poverty in the Wake of the Great Recession." The Brookings Institution. (2016).
- 22. Two researchers independently identified the charter school deserts on each map, then compared results.
- 23. The National Alliance for Public Charter Schools maintains a public database of state-level charter school policies and develops "model laws" for governing charter schools.
- 24. Wohlstetter, Zeehandelaar, and Griffith, "America's Best (and Worst) Cities for School Choice."

### NATIONAL FINDINGS

The national map below (Figure 1) provides an overview of charter school locations. The schools are indicated with green stars; census tracts with 20 percent to 40 percent of the population living at or below the poverty line are shaded grey; and tracts with more than 40 percent at or below the poverty line are shaded black. It is obvious that most charter schools are located in large metro areas.

Figure 1: Charter schools are largely located in metropolitan areas



**Note:** Charter schools are indicated with green stars. Census tracts with 20–40 percent at or below the poverty level are shaded grey; those with more than 40 percent at or below the poverty level are shaded black.

Table 1 shows the number of charter school deserts in each state. The average number in a state is 10.8, but that's not as revealing as the range. Hawaii, <sup>25</sup> Iowa, and New Hampshire <sup>26</sup> are the only three states with no charter school deserts, while Michigan, New York, Ohio, Tennessee, and Texas all have more than twenty. Although some of those states contain many charters, they're often distributed in ways that provide no access to some of their neediest communities.

Table 1: The number of charter school deserts in each state

STATE	CHARTER SCHOOL DESERTS	CHARTER ELEMENTARY SCHOOLS
Alaska	1	24
Arizona	13	389
Arkansas	12	21
California	18	874
Colorado	8	148
Connecticut	8	12
Delaware	3	54
District of Columbia	3	70
Florida	20	396
Georgia	19	92
Hawaii	0	29
Idaho	1	41
Illinois	14	67
Indiana	13	52
Iowa	0	2
Kansas	3	16
Louisiana	17	113
Maine	4	1
Maryland	9	34
Massachusetts	7	96
Michigan	21	488
Minnesota	10	196

STATE	CHARTER SCHOOL DESERTS	CHARTER ELEMENTARY SCHOOLS
Mississippi	9	1
Missouri	16	48
Nevada	6	39
New Hampshire	0	10
New Jersey	9	138
New Mexico	8	50
New York	21	225
North Carolina	14	170
Ohio	34	360
Oklahoma	15	44
Oregon	5	88
Pennsylvania	17	373
Rhode Island	3	14
South Carolina	19	41
Tennessee	22	38
Texas	23	510
Utah	6	121
Virginia	9	4
Wisconsin	12	128
Wyoming	1	4
AVERAGES	10.8	133.8

**Note:** States that have no charter schools in our most recent year of data (2014–15) are excluded. These states are Alabama, Kentucky, Montana, Nebraska, North Dakota, South Dakota, Vermont, Washington, and West Virginia.

<sup>25.</sup> Note that Hawaii's unique geography does not align well with our method of identifying charter school deserts. Because most of Hawaii's population is distributed across several islands and we define charter school deserts as groups of contiguous census tracts, many census tracts in Hawaii are divided by water and therefore cannot be contiguous.

<sup>26.</sup> Iowa and New Hampshire both have very few census tracts with 20 percent or more of their population living at or below the poverty line, thus not meeting our definition of charter school deserts—despite the fact that Iowa and New Hampshire had only two and ten charter schools, respectively, at the time of the study.

Table 2 describes the key charter school deserts in each state, thus providing an overview of the data that can be found in the individual state profiles. As indicated, these deserts are visual approximations; more precise location data for all charter (and traditional) schools can be found on the accompanying interactive map at www.edexcellence.net/charter-school-deserts.

Table 2: Approximate location of charter school deserts by state

STATE	CHARTER SCHOOL DESERT LOCATIONS
Alaska	Central Alaska around Fairbanks
Arizona	Southern/western/eastern parts of the Tucson metro area, southern/eastern/western parts of the Phoenix metro area
Arkansas	Northeast parts of the state, most of the Little Rock metro area
California	Northern California, west of Fresno, southeastern portions of the state
Colorado	Eastern and western parts of the Denver metro area, southern part of the state
Connecticut	Most of the New Haven metro area, rural areas in central Connecticut
Delaware	Western and southern parts of the Wilmington metro area
District of Columbia	Northeast and southern parts of Washington, D.C.
Florida	Many parts of the Miami metro area, southern/central/eastern parts of the Orlando metro area
Georgia	Western portions of the Atlanta metro area
Hawaii	None
Idaho	Northwest part of the Boise metro area
Illinois	Most of the Chicago metro area
Indiana	Most of the Indianapolis and Gary metro areas
lowa	None
Kansas	Most of the Kansas City and Wichita metro areas
Louisiana	Southern and eastern parts of the New Orleans metro area, western portion of the Baton Rouge metro area
Maine	Central and western parts of the state
Maryland	Most of the Baltimore metro area
Massachusetts	Boston, Amherst, and Pittsfield metro areas
Michigan	Most of the Flint, Detroit, and Grand Rapids metro areas
Minnesota	Most of the Minneapolis and St. Paul metro areas
Mississippi	Most of the western half of the state, western parts of the Jackson metro area
Missouri	Central and western parts of the St. Louis metro area, eastern/northern/southern parts of the Kansas City metro area
Nevada	Central/northwest/northeast parts of the Last Vegas metro area, central/western/northern parts of the Reno metro area

continued

**Table 2: Approximate location of charter school deserts by state (***continued*)

STATE	CHARTER SCHOOL DESERTS LOCATIONS
New Hampshire	None
New Jersey	Most of the Newark and Jersey City metro areas, and the central part of the Trenton metro area
New Mexico	Southwest/southeast/central parts of the Albuquerque metro area
New York	Western/southwestern parts of the Rochester metro area, central and northern parts of the Buffalo metro area, parts of Harlem, the Bronx, and Brooklyn in New York City
North Carolina	Many areas in the Charlotte metro area, western/eastern parts of the Durham metro area, southwestern and eastern parts of the Raleigh metro area
Ohio	Northern and western portions of the Cincinnati metro area, southeastern portions of Cleveland, most parts of the Columbus and Dayton metro areas
Oklahoma	Eastern part of the state, most of the Tulsa metro area, western/southeastern/northern parts of the Oklahoma City metro area
Oregon	Northern, eastern, and far western parts of the Portland metro area
Pennsylvania	Many parts of the Philadelphia metro area, western/central/eastern areas of the Pittsburgh metro area
Rhode Island	Western/southern parts of the Providence metro area as well as Pawtucket
South Carolina	Most of the state, large sections of the Charleston metro area
Tennessee	Central and western parts of the state, western parts of the Nashville metro area, northwest/ northeast/southern portions of the Memphis metro area
Texas	Western/southwest parts of the state, eastern/southern/northern parts of the Houston metro area, eastern portions of the Fort Worth metro area, and western/southeastern parts of the Dallas metro area
Utah	Central portions of the Salt Lake City metro area
Virginia	Western and southern parts of the state, southern/central/northern parts of the Richmond metro area
Wisconsin	Western part of the state, most of the Milwaukee metro area, northern/central/southern parts of the Madison metro area
Wyoming	Eastern part of state on the border with Nebraska



Table 3 shows the number of urban and rural charter school deserts by state. We see, once again, that these deserts are heavily concentrated in urban areas, but again with substantial variation: Alaska, Hawaii, Iowa, Maine, New Hampshire, and Wyoming have no urban charter school deserts, while Florida, Michigan, New York, Ohio, and Pennsylvania have at least fifteen each.<sup>27</sup> Similar variation exists in rural charter school deserts: twelve states have none while South Carolina and Tennessee have ten or more, with an average of 3.1 charter school deserts in rural areas across states.

Table 3: Number of charter school deserts in urban and rural areas, by state

STATE	URBAN CHARTER SCHOOL DESERTS	RURAL CHARTER SCHOOL DESERTS
Alaska	0	1
Arizona	12	1
Arkansas	4	8
California	14	4
Colorado	5	3
Connecticut	3	5
Delaware	2	1
District of Columbia	3	0
Florida	17	3
Georgia	14	5
Hawaii	0	0
Idaho	1	0
Illinois	14	0
Indiana	13	0
Iowa	0	0
Kansas	2	1
Louisiana	8	9
Maine	0	4
Maryland	8	1
Massachusetts	6	1
Michigan	18	3
Minnesota	9	1

STATE	URBAN CHARTER SCHOOL DESERTS	RURAL CHARTER SCHOOL DESERTS
Mississippi	1	8
Missouri	13	3
Nevada	6	0
New Hampshire	0	0
New Jersey	9	0
New Mexico	3	5
New York	17	4
North Carolina	9	5
Ohio	30	4
Oklahoma	8	7
Oregon	5	0
Pennsylvania	16	1
Rhode Island	3	0
South Carolina	4	15
Tennessee	12	10
Texas	14	9
Utah	6	0
Virginia	2	7
Wisconsin	10	2
Wyoming	0	1
AVERAGES	7.7	3.1

Table 4 presents an overview of each state's poverty demographics, the number of its elementary schools (charter and traditional), the number of charter school deserts, and the percentage of mid- and high-poverty census tracts that constitute those deserts. Interestingly, it shows that states with many charter schools (such as Florida, Michigan, Ohio, and Pennsylvania) also tend to have a high percentage of high- and medium-poverty census tracts that are charter school deserts. At the same time, states such as Arizona, the District of Columbia, and Texas—which all have above-average poverty rates—have a relatively low proportion of impoverished census tracts that are charter school deserts.

For several reasons, these data must be interpreted with caution, including the variation in size among census tracts; the imprecision of visual identification of charter school deserts; and the complicated ways that poverty rates, geography, and state choice policies interact. All that said, the descriptive statistics below should provide enough motivation for state and local insiders to take a deeper look at their own jurisdictions by examining the state profiles that follow or the interactive website.

**Table 4: Key state data** 

STATE	POVERTY RATE	TOTAL ELEMENTARY SCHOOLS	CHARTER ELEMENTARY SCHOOLS	CENSUS TRACTS	CHARTER SCHOOL DESERTS	DESERTS AS PERCENTAGE OF IMPOVERISHED CENSUS TRACTS
Alaska	9.9%	354	24	167	1	32%
Arizona	16.4%	1809	389	1526	13	11%
Arkansas	17.2%	510	21	686	12	27%
California	14.4%	5920	874	8057	18	3%
Colorado	11.0%	858	148	1249	8	14%
Connecticut	9.9%	752	12	833	8	27%
Delaware	11.8%	153	54	218	3	31%
District of Columbia	18.5%	192	70	179	3	15%
Florida	14.8%	2284	396	4245	20	10%
Georgia	16.1%	1372	92	1969	19	34%
Hawaii	9.5%	180	29	351	0	0%
Idaho	13.8%	589	41	298	1	8%
Illinois	13.0%	3465	67	3123	14	21%
Indiana	14.0%	1509	52	1511	13	6%
Iowa	11.7%	1078	2	825	0	0%
Kansas	12.2%	889	16	770	3	24%
Louisiana	20.1%	1019	113	1148	17	6%

continued

**Table 4: Key state data** (continued)

STATE	POVERTY RATE	TOTAL ELEMENTARY SCHOOLS	CHARTER ELEMENTARY SCHOOLS	CENSUS TRACTS	CHARTER SCHOOL DESERTS	DESERTS AS PERCENTAGE OF IMPOVERISHED CENSUS TRACTS
Maine	12.3%	755	1	358	4	19%
Maryland	9.7%	990	34	1406	9	27%
Massachusetts	10.5%	1105	96	1478	7	20%
Michigan	14.9%	2874	488	2813	21	15%
Minnesota	9.9%	1822	196	1338	10	19%
Mississippi	21.0%	628	1	664	9	50%
Missouri	14.0%	1357	48	1393	16	30%
Nevada	14.1%	436	39	687	6	38%
New Hampshire	7.6%	318	10	295	0	0%
New Jersey	10.4%	1738	138	2010	9	17%
New Mexico	19.1%	538	50	499	8	13%
New York	14.8%	2819	225	4919	21	14%
North Carolina	15.4%	1619	170	2195	14	19%
Ohio	14.5%	1915	360	2952	34	17%
Oklahoma	16.1%	1008	44	1046	15	19%
Oregon	13.4%	847	88	834	5	11%
Pennsylvania	12.9%	2158	373	3218	17	13%
Rhode Island	13.3%	207	14	244	3	50%
South Carolina	15.3%	712	41	1103	19	47%
Tennessee	15.8%	1041	38	1497	22	23%
Texas	15.6%	6180	510	5265	23	13%
Utah	10.2%	757	121	588	6	19%
Virginia	11.0%	1347	4	1907	9	22%
Wisconsin	11.3%	1281	128	1409	12	23%
Wyoming	10.9%	230	4	132	1	13%
AVERAGES	13.5%	1371.8	133.8	1604.9	10.8	20%

*Note:* States without charter schools as of 2014-15 are omitted. They include Alabama, Kentucky, Montana, Nebraska, North Dakota, South Dakota, Vermont, Washington, and West Virginia. Census data (2016) from https://www.census.gov/geo/maps-data/data/tallies/tractblock.html.

## POLICY IMPLICATIONS

Despite the thousands of charter schools opened over the past twenty-five years, many more are needed if low-income students in every part of America are to have the options they need. The patterns identified in this report suggest at least three issues that merit consideration by choice advocates, charter operators, and others wishing to expand the options for children in low-income areas in particular.

First, widen access to school choice in urban communities but also in the inner-ring suburbs, smaller cities, towns, and even rural areas. State and local maps (see *State Summaries*) show a troubling picture of unequal educational access to school choice across communities and can be used to target needy places that lack charter schools. Some cities, such as Richmond, Virginia, have so few charter schools that virtually the entire metro area is a charter school desert. Other cities, such as Cincinnati, are home to dozens of charter elementary schools, yet still contain numerous charter school deserts, with large swaths of the inner-ring and outer-ring suburbs lacking even a single charter school option. Promoting greater school choice means not only improving access in "inner city" communities, but also in inner-ring suburbs and other areas where low-income families are increasingly locating<sup>28</sup>—as well as in smaller cities, towns, and rural areas.

There is plenty of room for charter schools to grow if they are willing to go beyond the saturated cities. This means that charter operators, authorizers, and the philanthropies and organizations that support and study them must focus not only on the places where charters are already familiar, but also widen their gaze and consider other places that need such schools, but haven't been on their radar.<sup>29</sup>

#### Second, loosen restrictive state and local policies that limit the supply of schooling options.

Many states restrict the number, expansion rate, and/or location of charter schools. For example, Illinois law limits the number of charter schools in the state to 120 and imposes a maximum of seventy-five charter schools in Chicago. Rhode Island permits just thirty-five charter schools statewide, and Ohio mandates that charters open only in those school districts considered "challenged" by the state. Such policies stifle the creation of schooling options in many places that need them.<sup>30</sup>

- 28. A. Ehrenhalt, The Great Inversion and the Future of the American City (New York: Vintage Books, 2013).
- 29. Robin Lake, director of the Center on Reinventing Public Education, has made a similar point. See R. Lake and P. Hill, "Proposal: The Future of the Charter School Movement Requires a New Political Strategy," *The 74 Million*, January 30, 2018, https://www.the74million.org/2018/01/.
- 30. "Are There Caps on the Growth of Charter Schools in This State?" database (Washington, D.C.: National Alliance for Public Charter Schools, retrieved October 4, 2017), http://www.publiccharters.org/law-database/caps/.

It's no secret that advocates seeking to change such policies typically face vigorous opposition. Recall that charter opponents successfully defeated a 2016 Massachusetts ballot initiative that would have removed the charter cap in a state that boasts some of the highest-performing urban charter schools in the nation. Nor should we forget Washington State's lengthy, bruising, and costly political and legal battles in pursuit of charter legislation. We don't expect the opposition to quit, but one strategy worth consideration is encouraging favorable lawmakers to *incentivize* more supply in places that need it. For instance, states could offer infrastructure grants for operators willing to establish schools in charter school deserts.

Finally, level the playing field for charter operators. It's well known that charter schools operate on roughly two-thirds of the per-pupil funding received by most district schools. In fact, as of 2014, charters averaged \$7,131 per pupil compared to \$11,184 per student in traditional public schools.<sup>33</sup> Equalizing charter funding has been a long-term goal for the sector and, despite welcome progress in Colorado, Tennessee, and New Mexico, the funding gap between the sectors remains a real obstacle to situating new charters and growing existing schools.<sup>34</sup> Access to school facilities is another enduring challenge for the charter sector, as is equitable access to transportation. Our ability to make progress on one or more of these fronts is directly tied to the willingness and ability of charter operators to open schools in the places that need them, and to the persistence of advocates and community members in demanding the schools that kids need.



- 31. D. Scharfenberg, "Mass. Voters Reject Ballot Question on Charter Schools," *Boston Globe*, November 8, 2016, https://www.bostonglobe.com/metro/2016/11/08/charter/v34OA3vMI8dRABDsFc4JuM/story.html.
- 32. A. Prothero, "Washington's Embattled Charter School Law Heads to State Supreme Court Again," *Education Week*, December 19, 2017, http://blogs.edweek.org/edweek/charterschoice/2017/12/washingtons\_embattled\_charter\_schools\_law\_heads\_to\_state\_supreme\_court\_again.html.
- 33. M. Batdorff et al., *Charter School Funding: Inequity Expands* (Fayetteville, AR: University of Arkansas, Department of Education Reform, April 2014), http://www.uaedreform.org/wp-content/uploads/charter-school-funding-report.pdf.
- 34. Ibid.

### STATE SUMMARIES

In the pages that follow, we provide a summary of charter school deserts in each of the forty-two states (including the District of Columbia) that had charter schools in the 2014–15 GreatSchools database. <sup>35</sup> We also focus on some of the major metropolitan areas in each state. Users can examine these (and many more) locations on the accompanying interactive website: www.edexcellence.net/charter-school-deserts. Specifically, users can target any area of the country, and view its poverty level as well as the location, enrollment, proficiency status, and demographics of its neighboring traditional and charter elementary schools.

Alaska	24
Arizona	26
Arkansas	29
California	31
Colorado	34
Connecticut	37
Delaware	39
District of Columbia	41
Florida	43
Georgia	46
Hawaii	48
Idaho	50
Illinois	52
Indiana	54
lowa	57
Kansas	59
Louisiana	62
Maine	65
Maryland	67
Massachusetts	69
Michigan	71

Minnesota	74
Mississippi	76
Missouri	78
Nevada	81
New Hampshire	84
New Jersey	86
New Mexico	89
New York	91
North Carolina	95
Ohio	98
Oklahoma	102
Oregon	105
Pennsylvania	107
Rhode Island	
South Carolina	112
ennessee	114
「exas	117
Jtah	120
/irginia	122
Visconsin	124
Nyoming	127

<sup>35.</sup> The following states had no charter schools in the 2014–15 GreatSchools database: Alabama, Kentucky, Montana, Nebraska, North Dakota, South Dakota, Vermont, Washington, and West Virginia.

# ALASKA

## Where are the charter school deserts in Alaska?

We detail the distribution of schools in Alaska in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Alaska. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

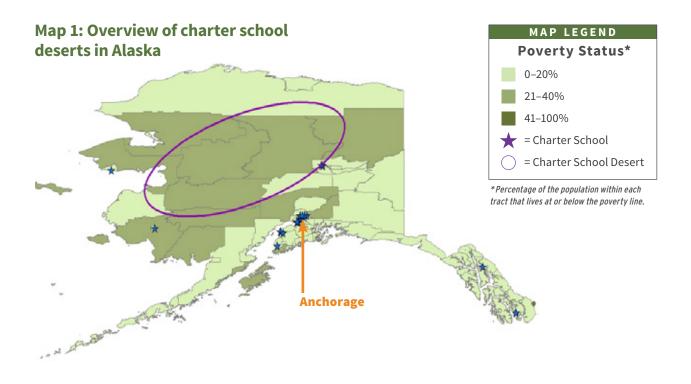
#### **Results**

Alaska has 354 public elementary schools, of which twenty-four are charter schools. The state as a whole has a 9.9 percent poverty rate. Alaska has just one charter school desert, representing about 32 percent of mid- to high-poverty census tracts, located in the middle of the state, although this area is obviously sparsely populated.

#### 

 $1. \ \ Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.$ 

Map 1 shows the census tracts and charter schools in Alaska. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one large charter school desert in the thinly populated central part of the state.



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Alaska—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Arizona?

We detail the distribution of schools in Arizona in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Arizona. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### Results

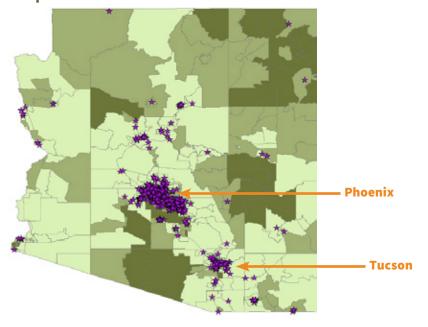
Arizona has 1,809 public elementary schools, of which 389 are charter schools. The state as a whole has a 16.4 percent poverty rate. Arizona has thirteen charter school deserts, representing 11 percent of mid- to high-poverty census tracts, located in the southern, western, and eastern parts of the Tucson metro area, and the southern, eastern and central parts of the Phoenix metro area.

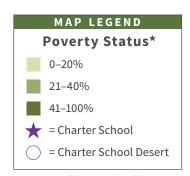
#### 

 $1. \ \ Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.$ 

Map 1 shows the census tracts and charter schools in Arizona. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map does not depict any charter school deserts because they are small and appear in the detailed maps that follow.<sup>2</sup> The charter school deserts in the Phoenix and Tucson areas are depicted in Maps 2 and 3. There are eight charter school deserts in the southern, eastern, and western parts of the Phoenix metro area. There are five charter school deserts in the southern, western, and eastern parts of the Tucson metro area (seen on the next page).

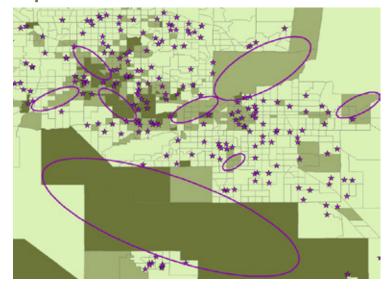
Map 1: Overview of charter school deserts in Arizona





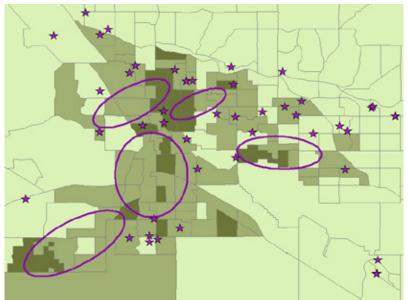
<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

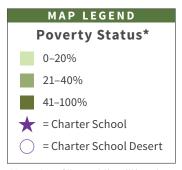
Map 2: Charter school deserts in the Phoenix metro area



2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Tucson metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Arizona—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Arkansas?

We detail the distribution of schools in Arkansas in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Arkansas. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Arkansas has 510 public elementary schools, of which twenty-one are charter schools. The state as a whole has a 17.2 percent poverty rate. Arkansas has twelve charter school deserts, representing 27 percent of mid- to high-poverty census tracts, spread throughout many rural areas in the state and the Little Rock metro area.

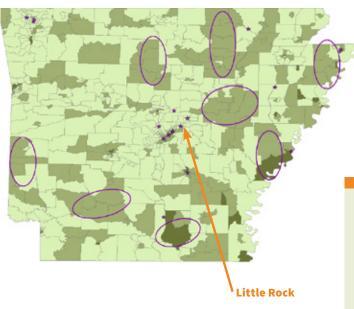
#### **Arkansas Charter School Deserts by the Numbers**

% of the state population living in poverty	17.2%
# of public elementary schools	510
# of charter schools	21
# of census tracts	686
# of charter school deserts	12
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	27%

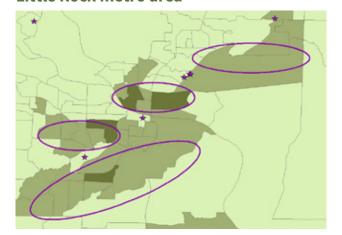
1. Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.

Map 1 shows the census tracts and charter schools in Arkansas. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts eight charter school deserts in rural areas in the northeastern and southwestern parts of the state; the charter school deserts in the Little Rock metro area appear in Map 2. There are four charter school deserts in the Little Rock metro area.

Map 1: Overview of charter school deserts in Arkansas



Map 2: Charter school deserts in the Little Rock metro area



# MAP LEGEND Poverty Status\* 0-20% 21-40% 41-100% ★ = Charter School Charter School Desert

\*Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Arkansas—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

### CALIFORNIA

## Where are the charter school deserts in California?

We detail the distribution of schools in California in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in California. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

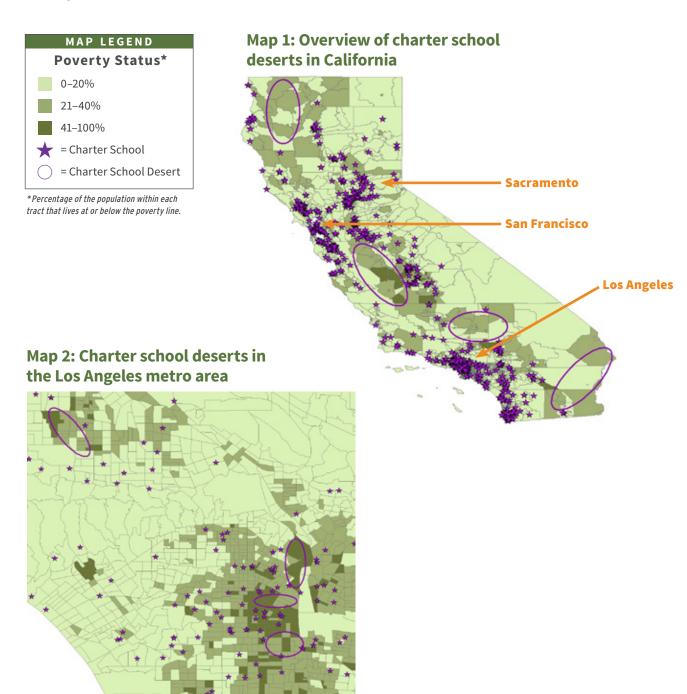
California has 5,920 public elementary schools, of which 874 are charter schools. The state as a whole has a 14.4 percent poverty rate. California has eighteen charter school deserts, representing 3 percent of mid- to high-poverty census tracts, located in the far northern (just west of Fresno) and southeastern parts of the state, and many in the Los Angeles, San Fransisco Bay, and Sacremento metro areas. In total, fourteen of the eighteen charter deserts are in urban areas.

#### **California Charter School Deserts by the Numbers**

% of the state population living in poverty	14.4%
# of public elementary schools	5,920
# of charter schools	874
# of census tracts	8,057
# of charter school deserts	18
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	3%

1. Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.

Map 1 shows the census tracts and charter schools in California. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts four charter school deserts in rural areas in the northernmost area, just west of Fresno, and in the central and southeast parts of the state;<sup>2</sup> the charter school deserts in the Los Angeles, San Francisco Bay, and Sacramento metro areas appear in Maps 2–4. There are four charter school deserts in the Los Angeles metro area, concentrated in the eastern part of the city.



<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

There are four charter school deserts in the San Francisco Bay metro area, including three in the east bay region. There are six charter school deserts spread throughout the Sacramento metro area.

Map 3: Charter school deserts in the San Francisco Bay metro area

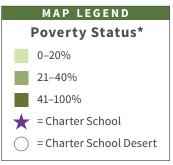


Map 4: Charter school deserts in the Sacramento metro area



#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in California—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



<sup>\*</sup> Percentage of the population within each tract that lives at or below the poverty line.



## Where are the charter school deserts in Colorado?

We detail the distribution of schools in Colorado in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Colorado. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Colorado has 858 public elementary schools, of which 148 are charter schools. The state as a whole has an 11.0 percent poverty rate. Colorado has eight charter school deserts, representing 14 percent of mid- to high-poverty census tracts, located in eastern and western parts of the Denver metro area, and in rural areas in the southern part of the state.

#### **Colorado Charter School Deserts by the Numbers**

% of the state population living in poverty	11.0%
# of public elementary schools	858
# of charter schools	148
# of census tracts	1,249
# of charter school deserts	8
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	14%

1. Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.

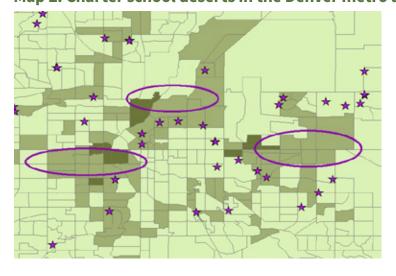
Map 1 shows the census tracts and charter schools in Colorado. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts three charter school deserts in rural areas in the southern and central regions;<sup>2</sup> the charter school deserts in the Denver and Colorado Springs metro areas appear in Maps 2 and 3. There are three charter school deserts in the Denver metro area. There are two charter school deserts in the Colorado Springs area (seen on the next page).

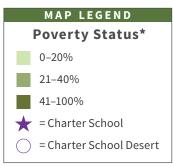
Denver

Colorado Springs

Map 1: Overview of charter school deserts in Colorado

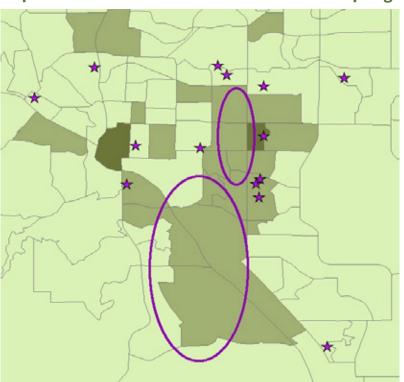




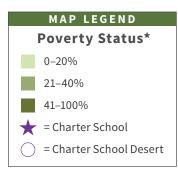


<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



Map 3: Charter school deserts in the Colorado Springs metro area



\*Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Colorado—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Connecticut?

We detail the distribution of schools in Connecticut to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Connecticut. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

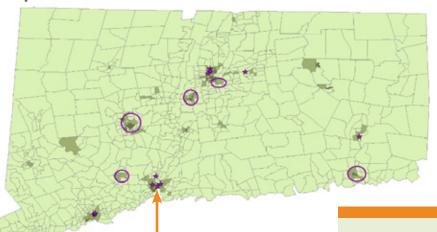
#### **Results**

Connecticut has 752 public elementary schools, of which twelve are charters. The state as a whole has a 9.9 percent poverty rate. Connecticut has eight charter school deserts, representing 27 percent of mid- to high-poverty census tracts, located in the central region of the state and the New Haven metro area.

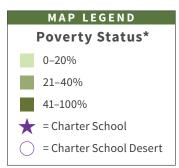
# Connecticut Charter School Deserts by the Numbers% of the state population living in poverty.9.9%# of public elementary schools.752# of charter schools.12# of census tracts.833# of charter school deserts.8Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise.27%

Map 1 shows the census tracts and charter schools in Connecticut. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts five charter school deserts in rural areas in the central region of the state; three of the charter school deserts in the New Haven metro area appear in Map 2. The three charter school deserts around New Haven are in the western and eastern parts of the metro area.

Map 1: Overview of charter school deserts in Connecticut

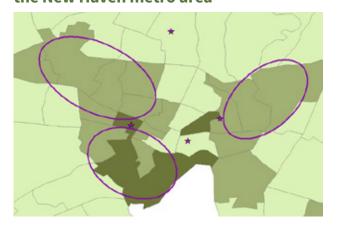


**New Haven** 



\*Percentage of the population within each tract that lives at or below the poverty line.

#### Map 2: Charter school deserts in the New Haven metro area



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Connecticut—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Delaware?

We detail the distribution of schools in Delaware in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Delaware. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

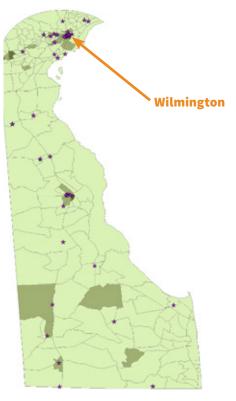
Delaware has 153 public elementary schools, of which fifty-four are charter schools. The state as a whole has an 11.8 percent poverty rate. Delaware has three charter school deserts, representing 31 percent of mid- to high-poverty census tracts, located in the western and southern parts of Wilmington.

#### **Delaware Charter School Deserts by the Numbers**

% of the state population living in poverty	.11.8%
# of public elementary schools	153
# of charter schools	54
# of census tracts	218
# of charter school deserts	3
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	31%

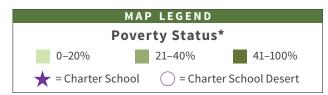
Map 1 shows the census tracts and charter schools in Delaware. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map does not depict any charter school deserts because they are small and depicted on the detailed map below;<sup>2</sup> the charter school deserts in the Wilmington metro area appear in Map 2. There are three charter school deserts in the western and southern parts of the Wilmington metro area.

Map 1: Overview of charter school deserts in Delaware



Map 2: Charter school deserts in the Wilmington metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Delaware—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

### DISTRICT OF COLUMBIA

## Where are the charter school deserts in the District of Columbia?

We detail the distribution of schools in Washington, D.C. in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in the District of Columbia. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

The District of Columbia has 192 public elementary schools, of which seventy are charter schools. The District as a whole has an 18.5 percent poverty rate. The District has three charter school deserts, representing 15 percent of mid- to high-poverty census tracts, located in the northeast and southern parts of the D.C. metro area.

#### District of Columbia Charter School Deserts by the Numbers

% of the state population living in poverty	18.5%
# of public elementary schools	192
# of charter schools	70
# of census tracts	179
# of charter school deserts	3
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	15%

Map 1 shows the census tracts and charter schools in the District of Columbia. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty.

MAP LEGEND

Poverty Status\*

□ 0-20%
□ 21-40%
□ 41-100%

★ = Charter School
○ = Charter School Desert

\*Percentage of the population within each tract that times at or below the poverty line.

Map 1: Overview of charter school deserts in the D.C. metro area

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in the District—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Florida?

We detail the distribution of schools in Florida in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Florida. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### Results

Florida has 2,284 public elementary schools, of which 396 are charter schools. The state as a whole has a 14.8 percent poverty rate. Florida has twenty charter school deserts, representing 10 percent of mid- to high-poverty census tracts, located in rural areas in the northern and central parts of the state and in the Miami, Tampa, and Orlando metro areas.

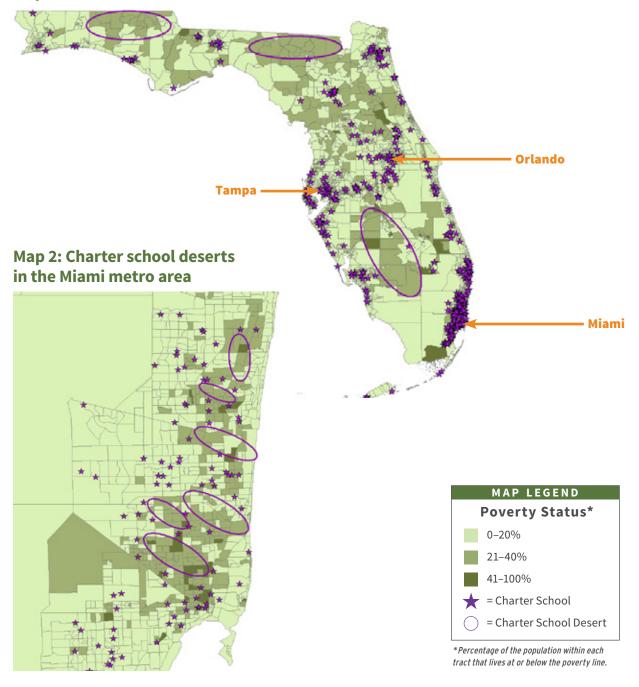
#### 

Approximate proportion of mid- to high-poverty census tracts

<sup>1.</sup> Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.

Map 1 shows the census tracts and charter schools in Florida. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts three charter school deserts in rural areas in the northern and central parts of the state;<sup>2</sup> the charter school deserts in the Miami, Tampa, and Orlando metro areas appear in Maps 2–4. There are six charter school deserts in the Miami metro area.

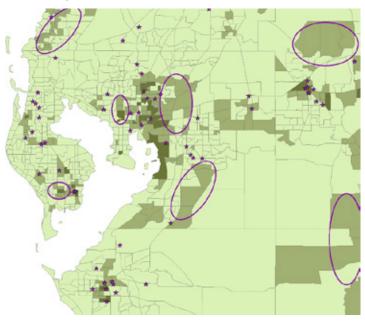
Map 1: Overview of charter school deserts in Florida



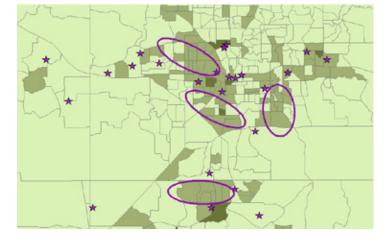
<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

There are seven charter school deserts spread throughout the greater Tampa area, including in the eastern and western portions of Tampa Bay, St. Petersburg, and in more rural areas east and southeast of Tampa. There are four charter school deserts in the Orlando metro area.

Map 3: Charter school deserts in the Tampa metro area

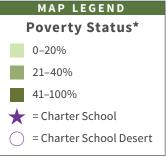


Map 4: Charter school deserts in the Orlando metro area



#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Florida simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.



## Where are the charter school deserts in Georgia?

We detail the distribution of schools in Georgia in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Georgia. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

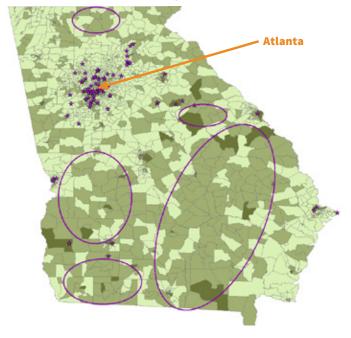
Georgia has 1,372 public elementary schools, of which ninety-two are charter schools. The state as a whole has a 16.1 percent poverty rate. Georgia has nineteen charter school deserts, representing 34 percent of mid- to high-poverty census tracts, located in rural areas of the state and the Atlanta metro area.

#### 

<sup>1.</sup> Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.

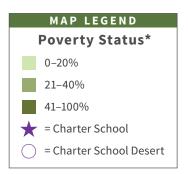
Map 1 shows the census tracts and charter schools in Georgia. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts five charter school deserts in rural areas across the state;<sup>2</sup> the charter school deserts in the Atlanta metro area appear in Map 2. There are fourteen charter school deserts spread throughout the Atlanta area, including the western, southern, and northwest parts of the metro area.

Map 1: Overview of charter school deserts in Georgia



Map 2: Charter school deserts in the Atlanta metro area





\*Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Georgia—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Hawaii?

We detail the distribution of schools in Hawaii in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Hawaii. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools. It should be noted that Hawaii's unique geography presents problems for our method of identifying charter school deserts. Because most of Hawaii's population is distributed across several islands and we define charter school deserts as groups of contiguous census tracts, many census tracts in Hawaii are divided by water and therefore cannot be contiguous. This may limit the possible formation of some charter school deserts.

#### **Results**

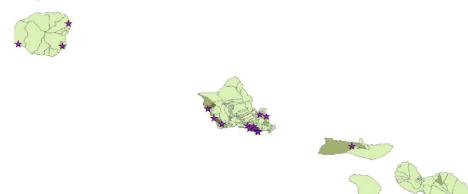
Hawaii has 180 public elementary schools, of which twenty-nine are charter schools. The state as a whole has a 9.5 percent poverty rate. Hawaii has no charter school deserts.<sup>1</sup>

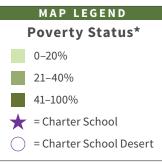
Hawaii Charter School Deserts by the Numbers	
% of the state population living in poverty	9.5%
# of public elementary schools	180
# of charter schools	29
# of census tracts	351
# of charter school deserts	
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	0%

<sup>1.</sup> Note that Hawaii's unique geography does not align well with our method of identifying charter school deserts. Because most of Hawaii's population is distributed across several islands and we define charter school deserts as groups of contiguous census tracts, many census tracts in Hawaii are divided by water and therefore cannot be contiguous.

Map 1 shows the census tracts and charter schools in Hawaii. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. There are no charter school deserts in Hawaii.

Map 1: Overview of charter school deserts in Hawaii





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Hawaii—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

## IDA IO

## Where are the charter school deserts in Idaho?

We detail the distribution of schools in Idaho in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Idaho. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

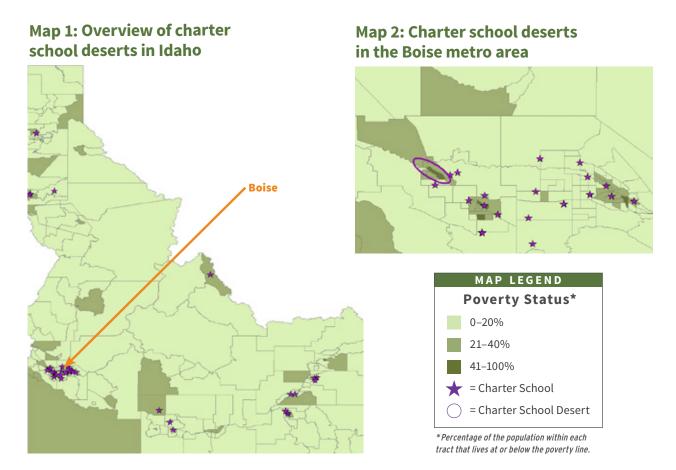
#### **Results**

Idaho has 589 public elementary schools, of which forty-one are charter schools. The state as a whole has a 13.8 percent poverty rate. Idaho has one charter school desert, representing 8 percent of mid-to high-poverty census tracts, located in the northwest part of the Boise metro area.

## Idaho Charter School Deserts by the Numbers% of the state population living in poverty.13.8%# of public elementary schools.589# of charter schools.41# of census tracts.298# of charter school deserts.1Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise.8%

<sup>1.</sup> Meaning those census tracts in which more than 20 percent of the population lives at or below the poverty line.

Map 1 shows the census tracts and charter schools in Idaho. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map does not depict any charter school deserts because they are small and depicted on the detailed map below;<sup>2</sup> the charter school desert in the Boise metro area appears in Map 2. There is one charter desert on the northwest side of the Boise metro area.



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Idaho—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Illinois?

We detail the distribution of schools in Illinois in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

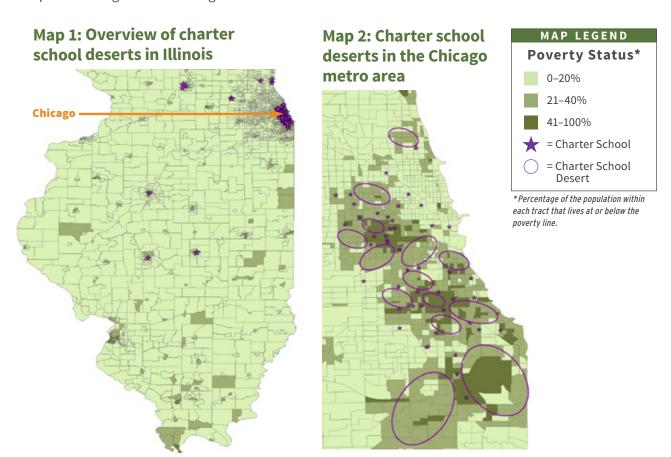
The following maps display where elementary charter schools are located in Illinois. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Illinois has 3,465 public elementary schools, of which sixty-seven are charter schools. The state as a whole has a 13.0 percent poverty rate. Illinois has fourteen charter school deserts, representing 21 percent of mid- to high-poverty census tracts, located in many parts of the Chicago metro area.

Illinois Charter School Deserts by the Numbers	
% of the state population living in poverty	13.0%
# of public elementary schools	3,465
# of charter schools	67
# of census tracts	3,123
# of charter school deserts	14
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	21%

Map 1 shows the census tracts and charter schools in Illinois. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map does not depict any charter school deserts because they are small and shown on the detailed map below;<sup>2</sup> the charter school deserts in the Chicago metro area appear in Map 2. There are fourteen charter school deserts spread throughout the Chicago metro area.



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Illinois—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Indiana?

We detail the distribution of schools in Indiana in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Indiana. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

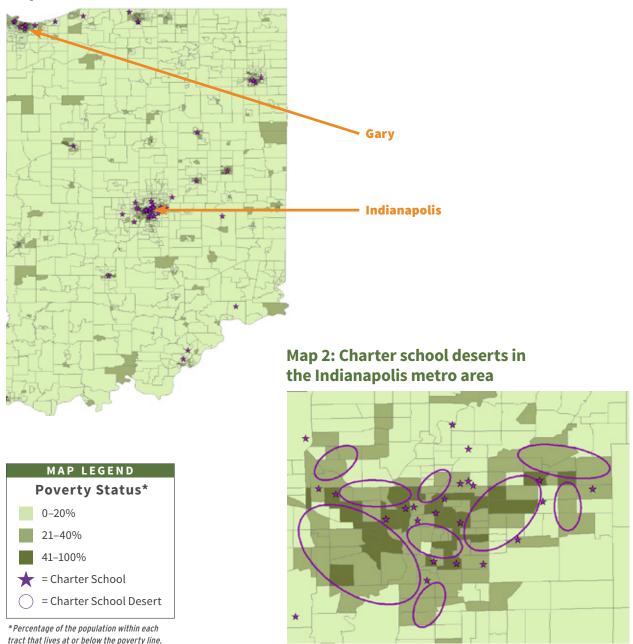
#### **Results**

Indiana has 1,509 public elementary schools, of which fifty-two are charter schools. The state as a whole has a 14.0 percent poverty rate. Indiana has thirteen charter school deserts, representing 6 percent of mid- to high-poverty census tracts, <sup>1</sup> located in the Indianapolis and Gary metro areas.

Indiana Charter School Deserts by the Numbe	rs
% of the state population living in poverty	14.0%
# of public elementary schools	1,509
# of charter schools	52
# of census tracts	1,511
# of charter school deserts	13
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	6%

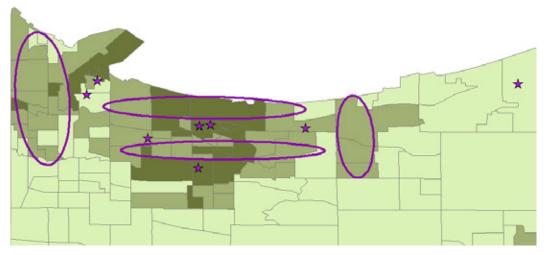
Map 1 shows the census tracts and charter schools in Indiana. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map does not depict any charter school deserts because they are small and depicted on the detailed maps below;<sup>2</sup> the charter school deserts in the Indianapolis and Gary metro areas appear in Maps 2 and 3. There are nine charter school deserts spread throughout the Indianapolis metro area. There are four charter school deserts in the Gary metro area (seen on the next page).

Map 1: Overview of charter school deserts in Indiana



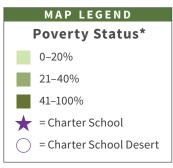
<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Gary metro area



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Indiana, simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



\*Percentage of the population within each tract that lives at or below the poverty line.





### Where are the charter school deserts in Iowa?

We detail the distribution of schools in Iowa in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Iowa. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

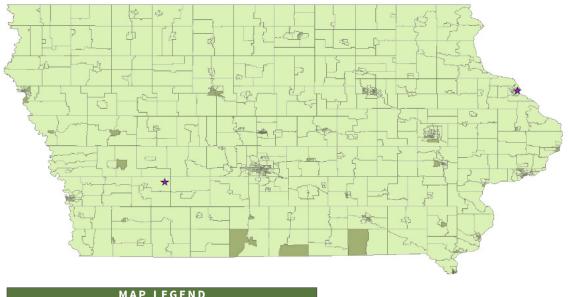
Iowa has 1,078 elementary schools of which only two are charter schools. The state as a whole has an 11.7 percent poverty rate. Iowa has no charter school deserts.<sup>1</sup>

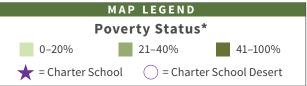
#### 

<sup>1.</sup> Iowa has few census tracts with 20 percent or more of the population living at or below the poverty line, thus not meeting our definition of charter school deserts—despite the fact that it had only two charter schools at the time of the study.

Map 1 shows the census tracts and charter schools in Iowa. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. There are no charter school deserts in Iowa.

Map 1: Overview of charter school deserts in Iowa





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Iowa—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

## KANSAS

## Where are the charter school deserts in Kansas?

We detail the distribution of schools in Kansas in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Kansas. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

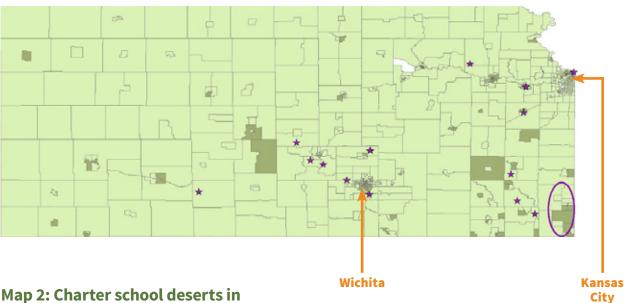
#### **Results**

Kansas has 889 public elementary schools, of which sixteen are charter schools. The state as a whole has a 12.2 percent poverty rate. Kansas has three charter school deserts, representing 24 percent of mid- to high-poverty census tracts, located in the southeast corner of the state, the western parts of the Kansas City metro area, and throughout most of the Wichita metro area.

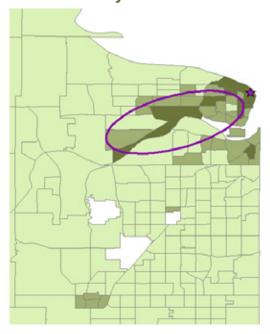
#### 

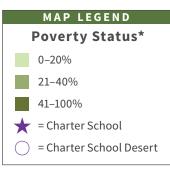
Map 1 shows the census tracts and charter schools in Kansas. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one charter school desert in a rural area in the southeast corner of the state;<sup>2</sup> the charter school deserts in the Kansas City and Wichita metro areas appear in Maps 2 and 3. There is one charter school desert spread throughout most of the Kansas City metro area. There is also one charter school desert spread throughout most of the Wichita metro area (seen on the next page).

Map 1: Overview of charter school deserts in Kansas



the Kansas City metro area

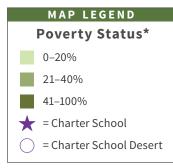




<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Wichita metro area



\*Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Kansas—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Louisiana?

We detail the distribution of schools in Louisiana in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Louisiana. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Louisiana has 1,019 public elementary schools, of which 113 are charter schools. The state as a whole has a 20.1 percent poverty rate. Louisiana has seventeen charter school deserts, representing 6 percent of mid- to high-poverty census tracts, located in many rural areas throughout the state, the southern and eastern parts of the New Orleans metro area, and the western portion of the Baton Rouge metro area.

#### 

Map 1 shows the census tracts and charter schools in Louisiana. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts nine charter school deserts in rural areas in the northwest, northeast, and central parts of the state;<sup>2</sup> the charter school deserts in the New Orleans and Baton Rouge metro areas appear in Maps 2 and 3. There are five charter school deserts in the New Orleans metro area. There are three charter school deserts in the Baton Rouge metro area (seen on the next page).

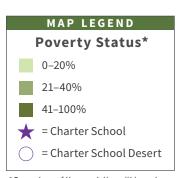
Baton Rouge

New Orleans

Map 1: Overview of charter school deserts in Louisiana

Map 2: Charter school deserts in the New Orleans metro area

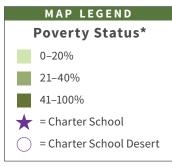




<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Baton Rouge metro area



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Louisiana—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Maine?

We detail the distribution of schools in Maine in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Maine. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

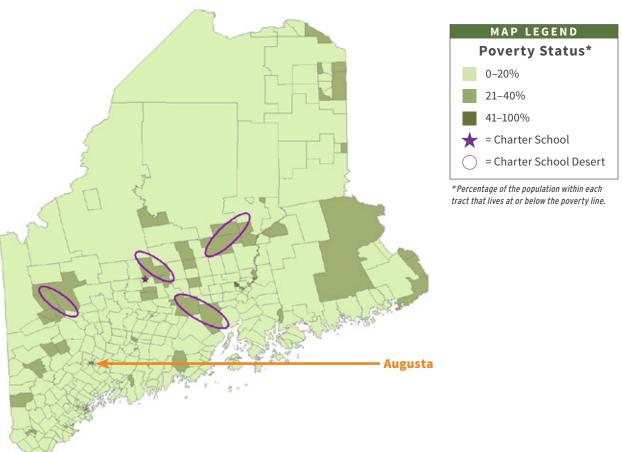
#### **Results**

Maine has 775 public elementary schools, of which only one is a charter school. The state as a whole has a 12.3 percent poverty rate. Maine has four charter school deserts, representing 19 percent of mid- to high-poverty census tracts, located in the central and western areas of the state.

Maine Charter School Deserts by the Numbers	
% of the state population living in poverty	12.3%
# of public elementary schools	775
# of charter schools	1
# of census tracts	358
# of charter school deserts	4
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	19%

Map 1 shows the census tracts and charter schools in Maine, highlighting in darker green the areas in which more than 20 percent of the population lives in poverty. The statewide map depicts four charter school deserts in rural areas in the central and western parts of the state.

Map 1: Overview of charter school deserts in Maine



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Maine—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Maryland?

We detail the distribution of schools in Maryland in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Maryland. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

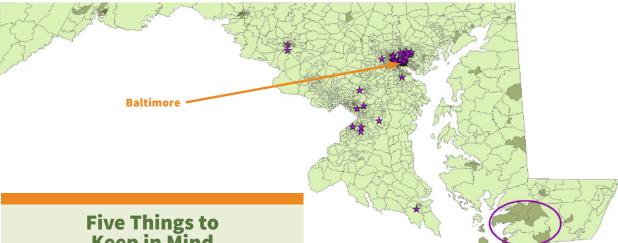
#### **Results**

There are 990 public elementary schools in Maryland, of which thirty-four are charter schools. The state as a whole has a 9.7 percent poverty rate. Maryland has nine charter school deserts, representing 27 percent of mid- to high-poverty census tracts, located in the southeast part of the state and the Baltimore metro area.

# Maryland Charter School Deserts by the Numbers% of the state population living in poverty.9.7%# of public elementary schools.990# of charter schools.34# of census tracts.1,406# of charter school deserts.9Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise.27%

Map 1 shows the census tracts and charter schools in Maryland. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one charter school desert in a rural area in the southeastern part of the state;<sup>2</sup> the charter school deserts in the Baltimore metro area appear in Map 2. There are eight charter school deserts spread throughout the Baltimore metro area.

Map 1: Overview of charter school deserts in Maryland

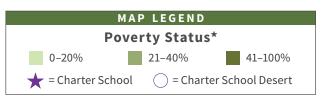


#### **Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Maryland—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

Map 2: Charter school deserts in the Baltimore metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

### **MASSACHUSETTS**

## Where are the charter school deserts in Massachusetts?

We detail the distribution of schools in Massachusetts in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Massachusetts. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

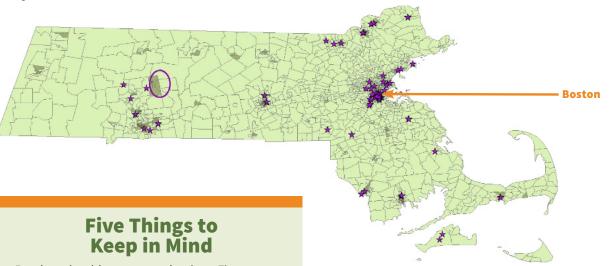
Massachusetts has 1,105 public elementary schools, of which ninety-six are charter schools. The state as a whole has a 10.5 percent poverty rate. Massachusetts has seven charter school deserts, representing 20 percent of mid- to high-poverty census tracts, located in the central part of the state and the Boston metro area.

#### **Massachusetts Charter School Deserts by the Numbers**

% of the state population living in poverty1	L0.5%
# of public elementary schools	1,105
# of charter schools	96
# of census tracts	1,478
# of charter school deserts	7
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	20%

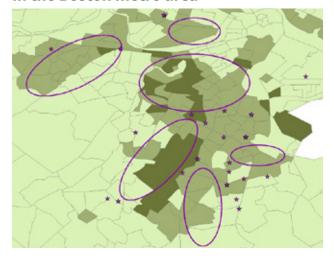
Map 1 shows the census tracts and charter schools in Massachusetts. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one charter school desert in a rural area in the central part of the state; the charter school deserts in the Boston metro area appear in Map 2. There are six charter school deserts spread throughout the Boston metro area.

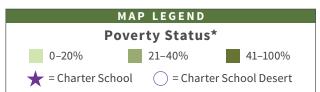
Map 1: Overview of charter school deserts in Massachusetts



Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Massachusetts—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

Map 2: Charter school deserts in the Boston metro area





\*Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Michigan?

We detail the distribution of schools in Michigan in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Michigan. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Michigan has 2,874 public elementary schools, of which 488 are charter schools. The state as a whole has a 14.9 percent poverty rate. Michigan has twenty-one charter school deserts, representing 15 percent of mid- to high-poverty census tracts, located in the western part of the state and the Detroit, Flint, and Grand Rapids metro areas.

## Michigan Charter School Deserts by the Numbers% of the state population living in poverty.14.9%# of public elementary schools.2,874# of charter schools.488# of census tracts.2,813# of charter school deserts.21Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise.15%

Map 1 shows the census tracts and charter schools in Michigan. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts three charter school deserts in rural areas in the western part of the state;² the charter school deserts in the Detroit, Flint, and Grand Rapids metro areas appear in Maps 2–4. There are thirteen charter school deserts spread throughout the Detroit metro area.

Grand Rapids Detroit

Map 1: Overview of charter school deserts in Michigan

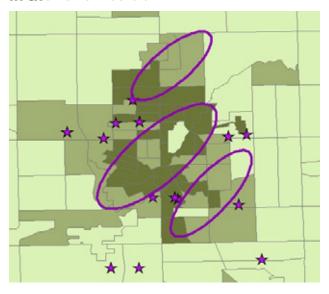




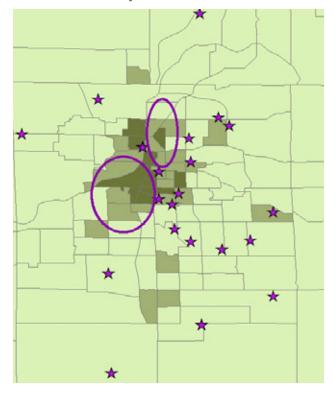
<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

There are three charter school deserts in the Flint metro area. There are two charter school deserts in the Grand Rapids metro area.

Map 3: Charter school deserts in the Flint metro area

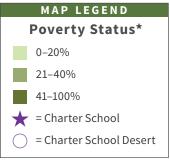


Map 4: Charter school deserts in the Grand Rapids metro area



#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Michigan simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.



## Where are the charter school deserts in Minnesota?

We detail the distribution of schools in Minnesota in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Minnesota. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

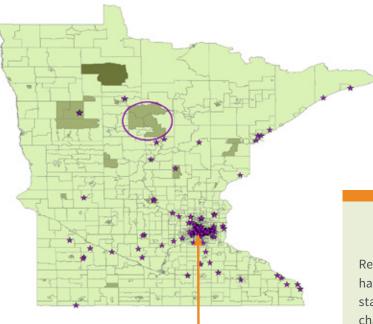
#### **Results**

Minnesota has 1,822 public elementary schools, of which 196 are charter schools. The state as a whole has a 9.9 percent poverty rate. Minnesota has ten charter school deserts, representing 19 percent of mid- to high-poverty census tracts, located in the central part of the state and the Minneapolis–St. Paul metro area.

## Minnesota Charter School Deserts by the Numbers% of the state population living in poverty.9.9%# of public elementary schools.1,822# of charter schools.196# of census tracts.1,338# of charter school deserts.10Approximate proportion of mid- to high-poverty census tracts<br/>that charter school deserts comprise.19%

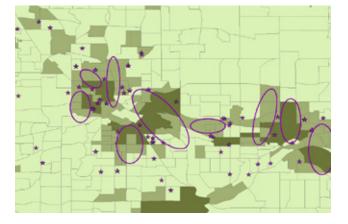
Map 1 shows the census tracts and charter schools in Minnesota. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one charter school desert in a rural area in the central part of the state;<sup>2</sup> the charter school deserts in the Minneapolis–St. Paul metro area appear in Map 2. There are nine charter school deserts spread throughout the Minneapolis–St. Paul metro area.

Map 1: Overview of charter school deserts in Minnesota



**Minneapolis** 

Map 2: Charter school deserts in the Minneapolis-St. Paul metro area



## MAP LEGEND Poverty Status\* 0-20% 21-40% 41-100% ★ = Charter School = Charter School Desert

\*Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Minnesota—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Mississippi?

We detail the distribution of schools in Mississippi in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Mississippi. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

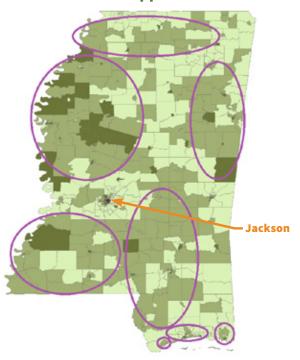
Mississippi has 628 public elementary schools, only one of which is a charter school. The state as a whole has a 21.0 percent poverty rate. Mississippi has nine charter school deserts, representing 50 percent of mid- to high-poverty census tracts.<sup>1</sup>

#### **Mississippi Charter School Deserts by the Numbers**

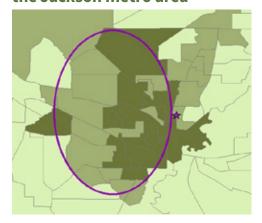
% of the state population living in poverty	21.0%
# of public elementary schools	628
# of charter schools	1
# of census tracts	664
# of charter school deserts	9
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	50%

Map 1 shows the census tracts and charter schools in Mississippi. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. Since Mississippi only has one charter school and many areas with medium or high poverty, much of the state is covered with charter school deserts, as shown in Map 1. The statewide map depicts eight charter school deserts of varying sizes spread throughout the state.<sup>2</sup> There is one additional large charter desert in the western part of the Jackson metro area, as shown in Map 2.

#### Map 1: Overview of charter school deserts in Mississippi

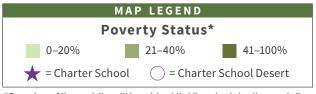


Map 2: Charter school deserts in the Jackson metro area



#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Mississippi—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools, since nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



\*Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, the Jackson area charter desert does not appear on it, though it is included on the city metro map.

### MISSOURI

## Where are the charter school deserts in Missouri?

We detail the distribution of schools in Missouri in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Missouri. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

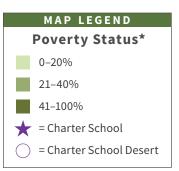
#### **Results**

Missouri has 1,357 public elementary schools, of which forty-eight are charter schools. The state as a whole has a 14.0 percent poverty rate. Missouri has sixteen charter school deserts, representing 30 percent of mid- to high-poverty census tracts, located in the southern and southeast portions of the state, the southern, eastern, and northern parts of the Kansas City metro area, and the central and northwestern parts of the St. Louis metro area.

#### **Missouri Charter School Deserts by the Numbers**

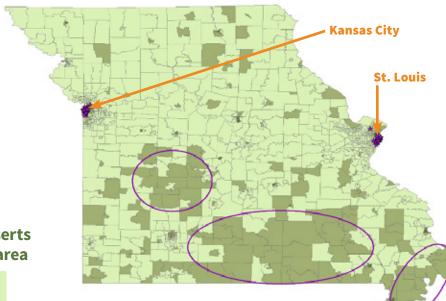
% of the state population living in poverty	14.0%
# of public elementary schools	1,357
# of charter schools	48
# of census tracts	1,393
# of charter school deserts	16
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	30%

Map 1 shows the census tracts and charter schools in Missouri. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts three charter school deserts in rural areas in the southern part of the state; the charter school deserts in the Kansas City and St. Louis metro areas appear in Maps 2 and 3. There are five charter school deserts in the Kansas City metro area. There are eight charter school deserts in the St. Louis metro area (seen on the next page).



\*Percentage of the population within each tract that lives at or below the poverty line.

Map 1: Overview of charter school deserts in Missouri



Map 2: Charter school deserts in the Kansas City metro area





2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

MAP LEGEND

Poverty Status\*

□ 0-20%

□ 21-40%

□ 41-100%

★ = Charter School

□ = Charter School Desert

\*Percentage of the population within each tract that lives at or below the poverty line.

Map 3: Charter school deserts in the St. Louis metro area

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Missouri—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Nevada?

We detail the distribution of schools in Nevada in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

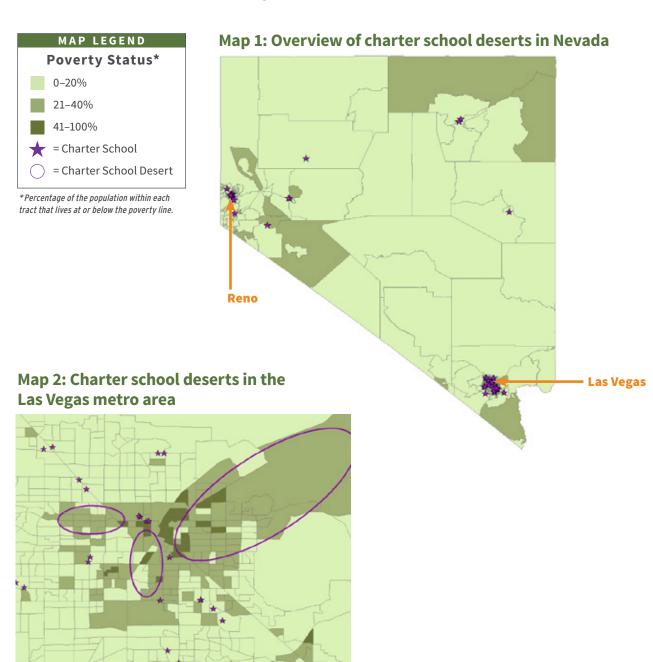
The following maps display where elementary charter schools are located in Nevada. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Nevada has 436 public elementary schools, of which thirty-nine are charter schools. The state as a whole has a 14.1 percent poverty rate. Nevada has six charter school deserts, representing 38 percent of mid- to high-poverty census tracts, located in the the central, northwest, and northeast parts of the Las Vegas metro area and the central, western, and northern parts of the Reno metro area.

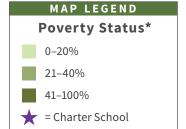
# Nevada Charter School Deserts by the Numbers% of the state population living in poverty.14.1%# of public elementary schools.436# of charter schools.39# of census tracts.687# of charter school deserts.6Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise.38%

Map 1 shows the census tracts and charter schools in Nevada. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map does not depict any charter school deserts because they are small and depicted on the detailed maps below; the charter school deserts in the Las Vegas and Reno metro areas appear in Maps 2 and 3. There are three charter school deserts in the Las Vegas metro area including in the central, northwest, and northeast areas. There are three charter school deserts in the Reno metro area including in the central, western, and northern areas (seen on the next page).



<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Reno metro area



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

= Charter School Desert

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Nevada—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in New Hampshire?

We detail the distribution of schools in New Hampshire in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in New Hampshire. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

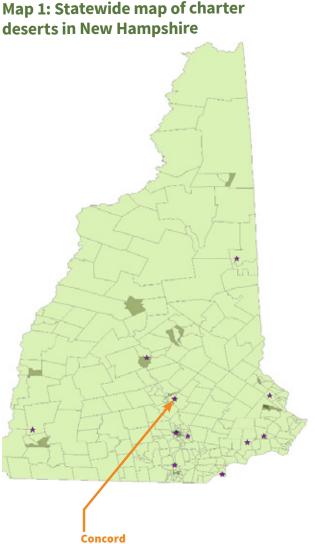
#### **Results**

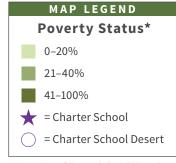
New Hampshire has 318 total public elementary schools, of which ten are charter schools. The state as a whole has a 7.6 percent poverty rate. New Hampshire has no charter school deserts.<sup>1</sup>

#### 

<sup>1.</sup> New Hampshire has few census tracts with 20 percent or more of the population living at or below the poverty line, thus not meeting our definition of charter school deserts—despite the fact that it had only ten charter schools at the time of the study.

Map 1 shows the census tracts and charter schools in New Hampshire. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts no charter school deserts.





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in New Hampshire—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in New Jersey?

We detail the distribution of schools in New Jersey in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in New Jersey. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

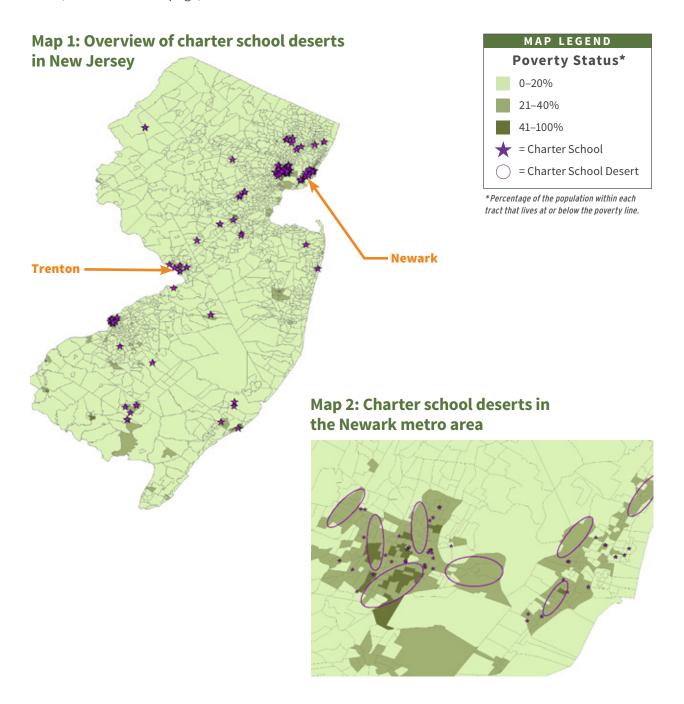
#### **Results**

New Jersey has 1,738 public elementary schools, of which 138 are charter schools. The state as a whole has a 10.4 percent poverty rate. New Jersey has nine charter school deserts, representing 17 percent of mid- to high-poverty census tracts. Eight charter deserts are located in Newark and surrounding areas. The other charter desert is in the Trenton metro area.

#### **New Jersey Charter School Deserts by the Numbers**

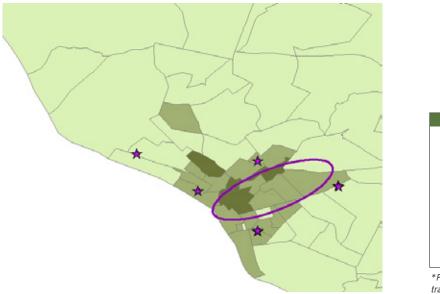
% of the state population living in poverty	0.4%
# of public elementary schools	1,738
# of charter schools	138
# of census tracts	2,010
# of charter school deserts	9
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	17%

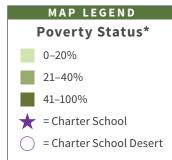
Map 1 shows the census tracts and charter schools in New Jersey. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts no charter school deserts in rural areas;<sup>2</sup> the charter school deserts in the Newark and Trenton metro areas appear in Maps 2 and 3. There are eight charter school deserts spread throughout the Newark metro area. There is one charter school desert in the central portion of the Trenton metro area (seen on the next page).



<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Trenton metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in New Jersey—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



### NEW MEXICO

## Where are the charter school deserts in New Mexico?

We detail the distribution of schools in New Mexico in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in New Mexico. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

New Mexico has 538 public elementary schools, of which fifty are charter schools. The state as a whole has a 19.1 percent poverty rate. New Mexico has eight charter school deserts, representing 13 percent of mid- to high-poverty census tracts, located in rural areas in the south, central, and northwest parts of New Mexico and the Albuquerque metro area.

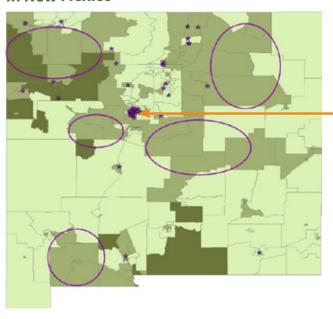
#### **New Mexico Charter School Deserts by the Numbers**

% of the state population living in poverty	
# of public elementary schools	
# of charter schools	
# of census tracts	
# of charter school deserts	
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	

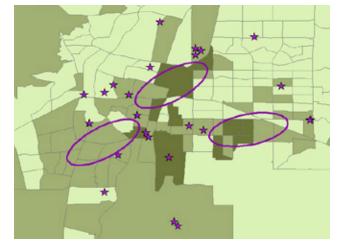
Map 1 shows the census tracts and charter schools in New Mexico. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts five charter school deserts in rural areas in areas in the south, central, and northwest of the state;² the charter school deserts in Albuquerque appear in Map 2. There are three charter school deserts in the Albuquerque metro area.

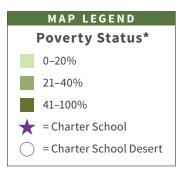
**Albuquerque** 

Map 1: Overview of charter school deserts in New Mexico



Map 2: Charter school deserts in the Albuquerque metro area





\*Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in New Mexico—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in New York?

We detail the distribution of schools in New York in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in New York. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

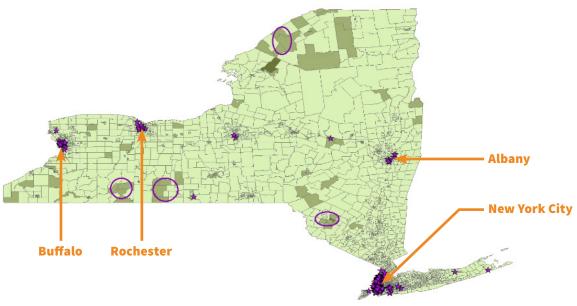
#### **Results**

New York has 2,819 public elementary schools, of which 225 are charter schools. The state as a whole has a 14.8 percent poverty rate. New York has twenty-one charter school deserts, representing 14 percent of mid- to high-poverty census tracts, four of which are located in rural areas.

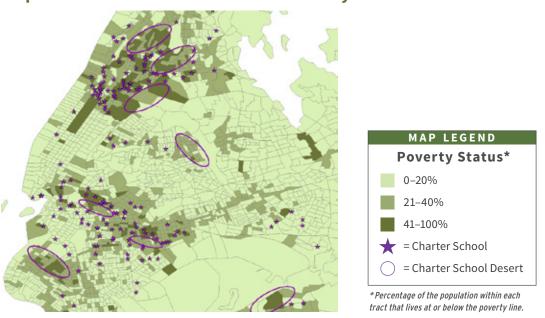
New York Charter School Deserts by the Numbers		
% of the state population living in poverty	14.8%	
# of public elementary schools	2,819	
# of charter schools	225	
# of census tracts	4,919	
# of charter school deserts	21	
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	14%	

Map 1 shows the census tracts and charter schools in New York. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts four charter school deserts in rural areas in southern and northern parts of the state;<sup>2</sup> the charter school deserts in the New York City, Buffalo, Rochester, and Albany metro areas appear in Maps 2–5. There are eight charter school deserts spread throughout the New York City metro area.

Map 1: Overview of charter school deserts in New York



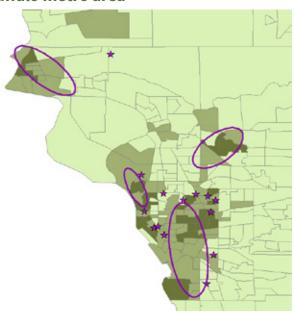
Map 2: Charter school deserts in New York City metro area



<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

There are four charter school deserts in the Buffalo metro area. There are two charter school deserts in the western and southwestern parts of the Rochester metro area. There are three charter school deserts in the Albany metro area (seen on the next page).

Map 3: Charter school deserts in the Buffalo metro area



MAP LEGEND

Poverty Status\*

0-20%

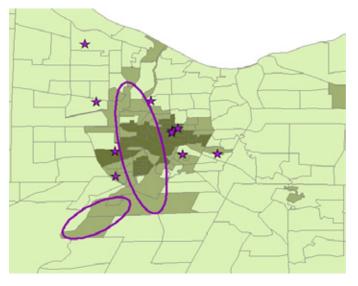
21-40%

41-100%

→ = Charter School

— Charter School Desert

Map 4: Charter school deserts in the Rochester metro area

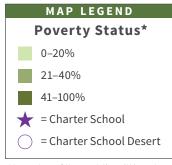




<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

Map 5: Charter school deserts in the Albany metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in New York—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in North Carolina?

We detail the distribution of schools in North Carolina in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in North Carolina. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

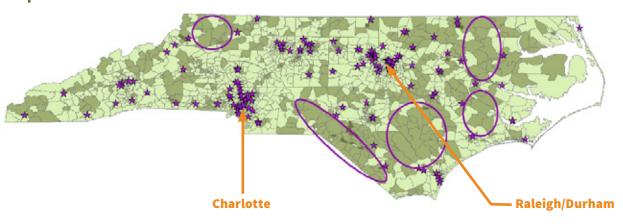
North Carolina has 1,619 public elementary schools, of which 170 are charter schools. The state as a whole has a 15.4 percent poverty rate. North Carolina has fourteen charter school deserts, representing 19 percent of mid- to high-poverty census tracts, located throughout many rural parts of the state as well as the Raleigh, Durham, and Charlotte metro areas.

#### North Carolina Charter School Deserts by the Numbers

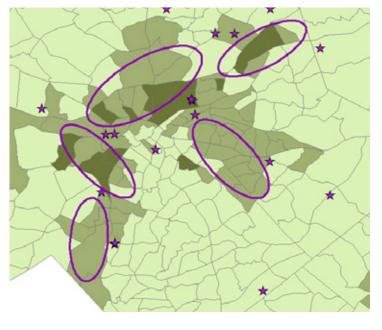
% of the state population living in poverty	15.4%
# of public elementary schools	1,619
# of charter schools	170
# of census tracts	2,195
# of charter school deserts	14
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	19%

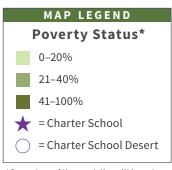
Map 1 shows the census tracts and charter schools in North Carolina. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts five charter school deserts in rural areas throughout the state;<sup>2</sup> the charter school deserts in the Charlotte, Raleigh, and Durham areas appear in Maps 2 and 3. There are five charter school deserts spread throughout the Charlotte metro area. There are two charter school deserts in both the Raleigh and Durham metro areas (seen on the next page).

Map 1: Overview of charter school deserts in North Carolina



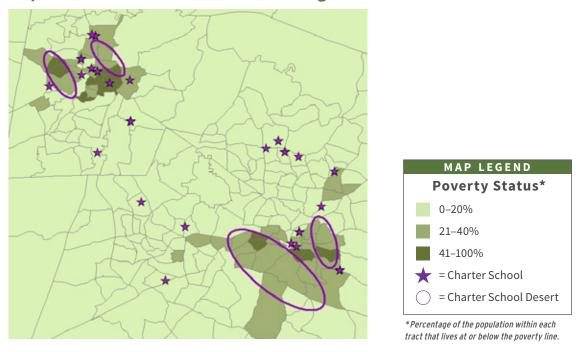
Map 2: Charter school deserts in the Charlotte metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



Map 3: Charter school deserts in the Raleigh and Durham metro areas

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in North Carolina—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



## Where are the charter school deserts in Ohio?

We detail the distribution of schools in Ohio in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Ohio. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Ohio has 1,915 public elementary schools, of which 360 are charter schools. The state as a whole has a 14.5 percent poverty rate. Ohio has thirty-four charter school deserts, representing 17 percent of mid- to high-poverty census tracts, located in the northern and western portions of Cincinnati, the southeastern portions of Cleveland, and many parts of Columbus and Dayton.

Ohio Charter School Deserts by the Numbers		
% of the state population living in poverty	14.5%	
# of public elementary schools	1,91	
# of charter schools	36	
# of census tracts	2,95	
# of charter school deserts	3	
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	179	

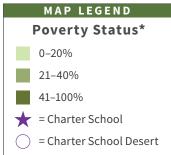
Map 1 shows the census tracts and charter schools in Ohio. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts four charter school deserts in rural areas in the southeastern and far northeastern parts of the state;<sup>2</sup> the charter school deserts in the Cincinnati, Cleveland, Columbus, and Dayton metro areas appear in Maps 2–5. There are seven charter deserts spread throughout the Cincinnati metro area.

Map 1: Overview of charter school deserts in Ohio

Cleveland

Columbus

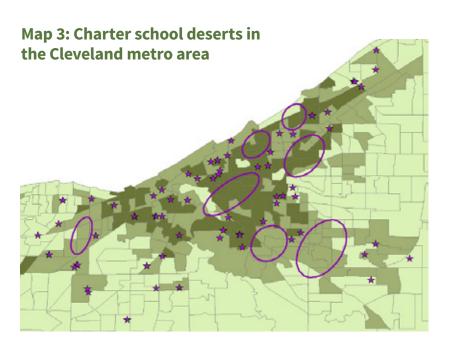
Map 2: Charter school deserts in the Cincinnati metro area



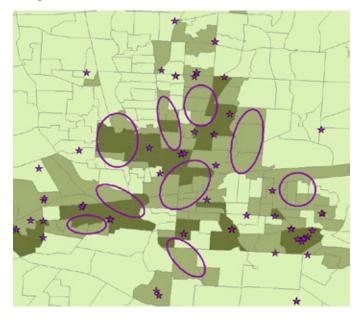
<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

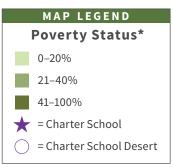
<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

There are seven charter school deserts in the Cleveland metro area mostly concentrated in the eastern and northeastern parts of the city. There are nine charter school deserts spread throughout the Columbus metro area. There are seven charter school deserts spread throughout the Dayton metro area (seen on the next page).

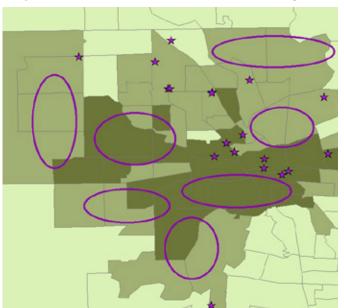


Map 4: Charter school deserts in the Columbus metro area

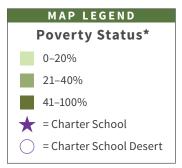




\*Percentage of the population within each tract that lives at or below the poverty line.



Map 5: Charter school deserts in the Dayton metro area



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Ohio—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.



### OKLAHOMA

## Where are the charter school deserts in Oklahoma?

We detail the distribution of schools in Oklahoma in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Oklahoma. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

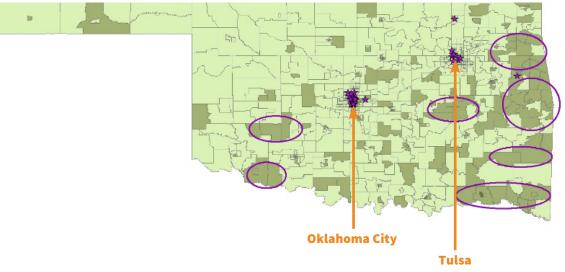
Oklahoma has 1,008 public elementary schools, of which forty-four are charter schools. The state as a whole has a 16.1 percent poverty rate. Oklahoma has fifteen charter school deserts, representing 19 percent of mid- to high-poverty census tracts, located in the eastern part of the state, the western, southeastern, and northern parts of the Oklahoma City metro area, and most of the Tulsa metro area.

#### **Oklahoma Charter School Deserts by the Numbers**

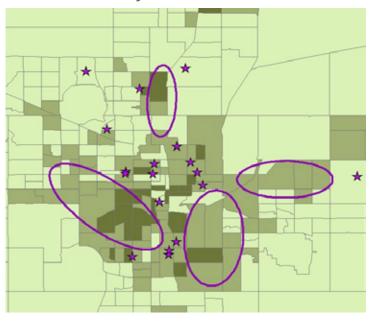
of the state population living in poverty	C
f public elementary schools	#
f charter schools	#
f census tracts	#
f charter school deserts	#
proximate proportion of mid- to high-poverty census tracts at charter school deserts comprise	

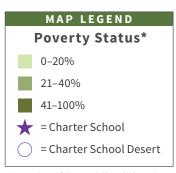
Map 1 shows the census tracts and charter schools in Oklahoma. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts seven charter school deserts in rural areas on the eastern border, and in the southwest part of the state;<sup>2</sup> the charter school deserts in the Oklahoma City and Tulsa metro areas appear in Maps 2 and 3. There are four charter school deserts in the Oklahoma City metro area. There are four charter school deserts in the Tulsa metro area (seen on the next page).

Map 1: Overview of charter school deserts in Oklahoma



Map 2: Charter school deserts in the Oklahoma City metro area

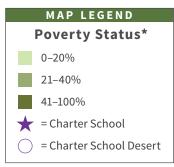




<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Tulsa metro area



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Oklahoma—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Oregon?

We detail the distribution of schools in Oregon in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Oregon. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

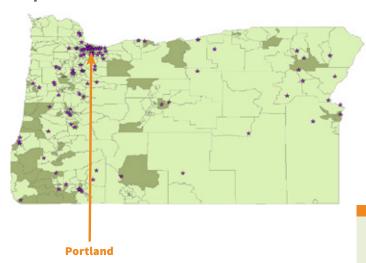
#### **Results**

Oregon has 847 public elementary schools, of which eighty-eight are charter schools. The state as a whole has a 13.4 percent poverty rate. Oregon has five charter school deserts, representing 11 percent of mid- to high-poverty census tracts, all located in the Portland metro area.

#### 

Map 1 shows the census tracts and charter schools in Oregon. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts no charter school deserts in rural areas; the charter school deserts in Portland appear in Map 2. There are five charter school deserts spread throughout the Portland metro area.

Map 1: Overview of charter school deserts in Oregon



MAP LEGEND

Poverty Status\*

0-20%

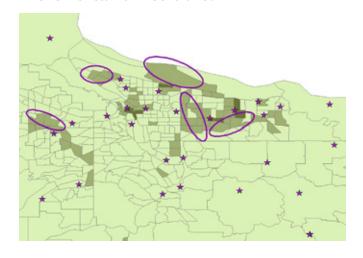
21-40%

41-100%

★ = Charter School

Charter School Desert

#### Map 2: Charter school deserts in the Portland metro area



#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Oregon—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.



## Where are the charter school deserts in Pennsylvania?

We detail the distribution of schools in Pennsylvania in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Pennsylvania. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

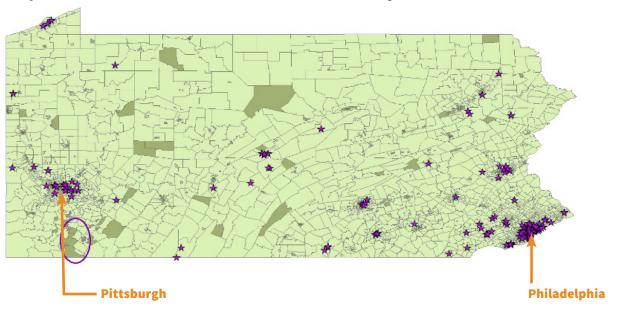
Pennsylvania has 2,158 public elementary schools, of which 373 are charter schools. The state as a whole has a 12.9 percent poverty rate. Pennsylvania has seventeen charter school deserts, representing 13 percent of mid- to high-poverty census tracts, located mostly in urban areas.

#### **Pennsylvania Charter School Deserts by the Numbers**

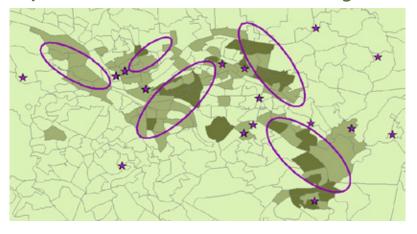
% of the state population living in poverty	.12.9%
# of public elementary schools	2,158
# of charter schools	373
# of census tracts	3,218
# of charter school deserts	17
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	13%

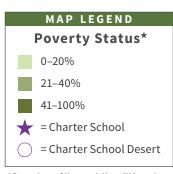
Map 1 shows the census tracts and charter schools in Pennsylvania. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one charter school desert in a rural area in the southwest part of the state;<sup>2</sup> the charter school deserts in the Pittsburgh and Philadelphia metro areas appear in Maps 2 and 3. There are five charter school deserts spread throughout the Pittsburgh metro area. There are eleven charter school deserts in the Philadelphia metro area, which span a majority of the census tracts in the area (seen on the next page).

Map 1: Overview of charter school deserts in Pennsylvania



Map 2: Charter school deserts in the Pittsburgh metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

MAP LEGEND **Poverty Status\*** 0-20% 21-40% 41-100% = Charter School = Charter School Desert \*Percentage of the population within each tract that lives at or below the poverty line.

Map 3: Charter school deserts in the Philadelphia metro area

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Pennsylvania—simply to show which highpoverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Rhode Island?

We detail the distribution of schools in Rhode Island in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Rhode Island. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Rhode Island has 207 public elementary schools, of which fourteen are charter schools. The state as a whole has a 13.3 percent poverty rate. Rhode Island has three charter school deserts, representing 50 percent of mid- to high-poverty census tracts, all located in the Providence metro area.

#### **Rhode Island Charter School Deserts by the Numbers**

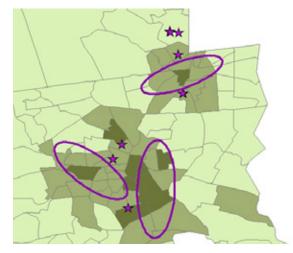
% of the state population living in poverty	.3%
# of public elementary schools	.207
# of charter schools	14
# of census tracts	.224
# of charter school deserts	3
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	<b>50</b> %

Map 1 shows the census tracts and charter schools in Rhode Island. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts no charter school deserts in rural areas;<sup>2</sup> the charter school deserts in the Providence metro area appear in Map 2. There are three of them.

Map 1: Overview of charter school deserts in Rhode Island



Map 2: Charter school deserts in the Providence metro area



# MAP LEGEND Poverty Status\* 0-20% 21-40% 41-100% ★ = Charter School Charter School Desert

\*Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Rhode Island—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools, since nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

## SOUTH CAROLINA

## Where are the charter school deserts in South Carolina?

We detail the distribution of schools in South Carolina in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in South Carolina. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

South Carolina has 712 public elementary schools, of which forty-one are charter schools. The state as a whole has a 15.3 percent poverty rate. South Carolina has nineteen charter school deserts, representing 47 percent of mid- to high-poverty census tracts, located mostly in rural areas.

#### **South Carolina Charter School Deserts by the Numbers**

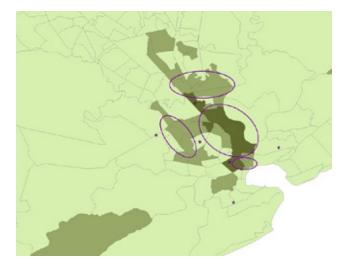
% of the state population living in poverty	15.3%
# of public elementary schools	712
# of charter schools	41
# of census tracts	1,103
# of charter school deserts	19
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	47%

Map 1 shows the census tracts and charter schools in South Carolina. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts fifteen charter school deserts in rural areas spread throughout much of the state;<sup>2</sup> the charter school deserts in the Charleston metro area appear in Map 2. There are four of them.

Map 1: Overview of charter school deserts in South Carolina



Map 2: Charter school deserts in the Charleston metro area



# MAP LEGEND Poverty Status\* 0-20% 21-40% 41-100% ★ = Charter School Desert

\*Percentage of the population within each tract that lives at or below the poverty line.

#### Five Things to Keep in Mind

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in South Carolina—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

### TENNESSEE

## Where are the charter school deserts in Tennessee?

We detail the distribution of schools in Tennessee in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Tennessee. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

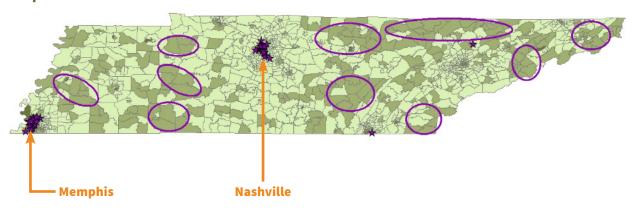
Tennessee has 1,041 public elementary schools, of which thirty-eight are charter schools. The state as a whole has a 15.8 percent poverty rate. Tennessee has twenty-two charter school deserts, representing 23 percent of mid- to high-poverty census tracts, located in the western part of the Nashville metro area, and spread throughout the Memphis metro area.

#### **Tennessee Charter School Deserts by the Numbers**

% of the state population living in poverty	15.8%
# of public elementary schools	1,041
# of charter schools	38
# of census tracts	1,497
# of charter school deserts	22
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	23%

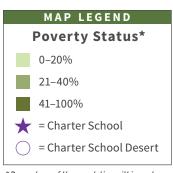
Map 1 shows the census tracts and charter schools in Tennessee. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts ten charter school deserts in rural areas, mainly in the eastern part of the state;<sup>2</sup> the charter school deserts in the Nashville and Memphis metro areas appear in Maps 2 and 3. There are seven charter school deserts in the Nashville metro area and five in the Memphis metro area.

Map 1: Overview of charter school deserts in Tennessee



Map 2: Charter school deserts in the Nashville metro area



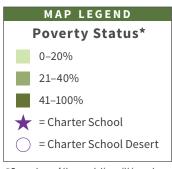


<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



Map 3: Charter school deserts in the Memphis metro area



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Tennessee—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Texas?

We detail the distribution of schools in Texas in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

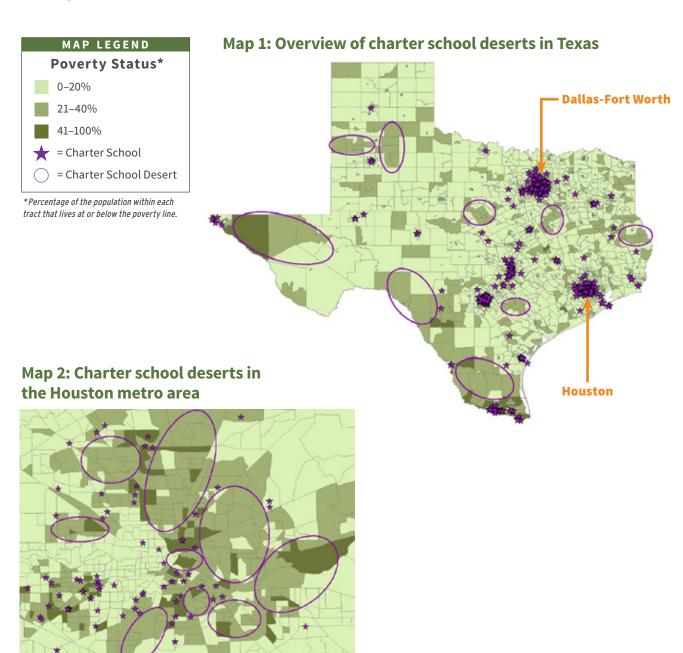
The following maps display where elementary charter schools are located in Texas. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

Texas has 6,180 public elementary schools, of which 510 are charter schools. The state as a whole has a 15.6 percent poverty rate. Texas has twenty-three charter school deserts, representing 13 percent of mid- to high-poverty census tracts.<sup>1</sup>

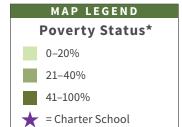
15.6%
6,180
510
5,26!
2
13%

Map 1 shows the census tracts and charter schools in Texas. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts nine charter school deserts in rural areas spread throughout the state;<sup>2</sup> the charter school deserts in the Houston and Dallas-Fort Worth metro areas appear in Maps 2 and 3. There are nine charter school deserts spread throughout the Houston metro area including in the eastern, southern, and northern parts around the city. There are five charter school deserts in the Dallas-Fort Worth metro area (seen on the next page).



<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

Map 3: Charter school deserts in the Dallas-Fort Worth metro area



<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

= Charter School Desert

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Texas—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Utah?

We detail the distribution of schools in Utah in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Utah. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

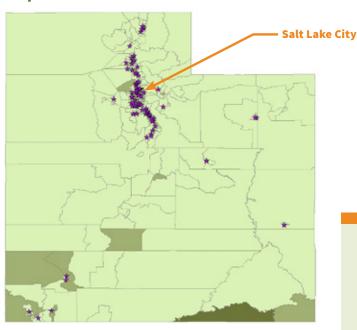
#### **Results**

Utah has 757 public elementary schools, of which 121 are charter schools. The state as a whole has a 10.2 percent poverty rate. Utah has six charter school deserts, representing 19 percent of mid- to high-poverty census tracts, all located in the Salt Lake City metro area.

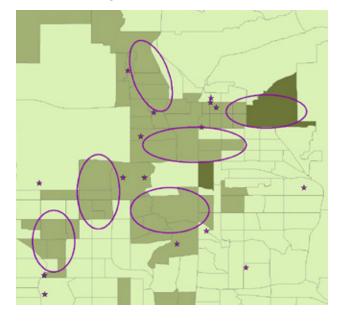
<b>Utah Charter School Deserts by the Numbers</b>	
% of the state population living in poverty	10.2%
# of public elementary schools	757
# of charter schools	121
# of census tracts	588
# of charter school deserts	6
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	19%

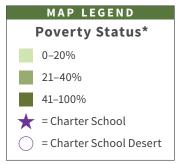
Map 1 shows the census tracts and charter schools in Utah. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts no charter school deserts in rural areas;<sup>2</sup> the charter school deserts in the Salt Lake City metro area appear in Map 2. There are six of them.

Map 1: Overview of charter school deserts in Utah



Map 2: Charter school deserts in the Salt Lake City metro area





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Utah—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

2. Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



## Where are the charter school deserts in Virginia?

We detail the distribution of schools in Virginia in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Virginia. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

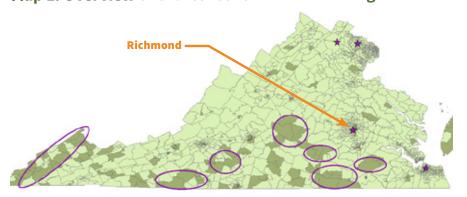
#### **Results**

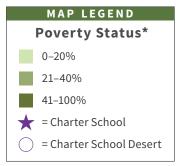
Virginia has 1,347 public elementary schools, of which four are charter schools. The state as a whole has an 11.0 percent poverty rate. Virginia has nine charter school deserts, representing 22 percent of mid- to high-poverty census tracts, located in the western and southern portions of the state, and in the southern, central, and northern portions of the Richmond metro area.

#### 

Map 1 shows the census tracts and charter schools in Virginia. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts seven charter school deserts in rural areas mostly concentrated in the southern part of the state;<sup>2</sup> the charter school deserts in the Richmond metro area appear in Map 2. There are two large ones covering most of the city.

Map 1: Overview of charter school deserts in Virginia





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

Map 2: Charter school deserts in the Richmond metro area



#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Virginia—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.

<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.

### WISCONSIN

## Where are the charter school deserts in Wisconsin?

We detail the distribution of schools in Wisconsin in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Wisconsin. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

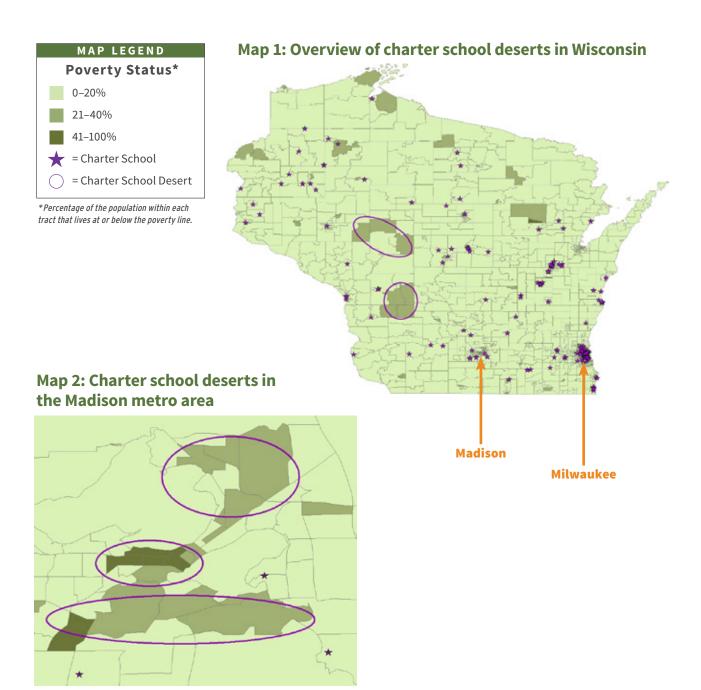
#### **Results**

Wisconsin has 1,281 public elementary schools, of which 128 are charter schools. The state as a whole has an 11.3 percent poverty rate. Wisconsin has twelve charter school deserts, representing 23 percent of mid- to high-poverty census tracts, located in the western part of the state, the northern, central, and southern parts of the Madison metro area, and in many areas throughout the Milwaukee metro area.

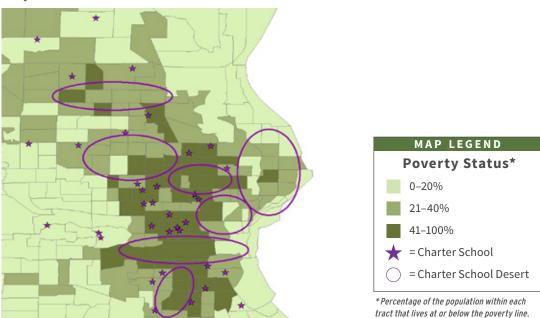
#### **Wisconsin Charter School Deserts by the Numbers**

% of the state population living in poverty	11.3%
# of public elementary schools	1,281
# of charter schools	128
# of census tracts	1,409
# of charter school deserts	12
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	23%

Map 1 shows the census tracts and charter schools in Wisconsin. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts two charter school deserts in rural areas in the western part of the state; the charter school deserts in the Madison and Milwaukee metro areas appear in Maps 2 and 3. There are three charter school deserts in the Madison metro area. There are seven charter school deserts spread throughout most of the Milwaukee metro area (seen on the next page).



<sup>2.</sup> Due to the necessarily diminished scale on the state map, all charter school deserts do not appear on it, though they are included on the city metro maps.



Map 3: Charter school deserts in the Milwaukee metro area

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Wisconsin—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.





## Where are the charter school deserts in Wyoming?

We detail the distribution of schools in Wyoming in order to provide educators and policymakers with information about communities that provide no access to charter schools. Many families lack the financial means to move out of neighborhoods when dissatisfied with their schooling options, so the location of schools is key to ensuring access and equity for all students. Policymakers and parents can use this information to better understand the supply of schooling options in their states and cities—and to press for changes that would improve that supply. Charter operators and authorizers may also find this analysis helpful as they consider where to establish new schools.

#### What is a charter school desert?

The following maps display where elementary charter schools are located in Wyoming. A **charter school desert** is three or more contiguous census tracts that have poverty rates greater than 20 percent but that have no charter schools.

#### **Results**

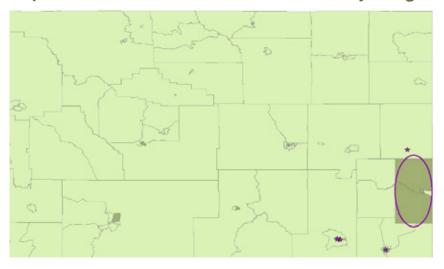
Wyoming has 230 public elementary schools, of which four are charter schools. The state as a whole has a 10.9 percent poverty rate. Wyoming has one charter school desert, representing 13 percent of mid- to high-poverty census tracts, located in the far eastern portion of the state, near the border with Nebraska.

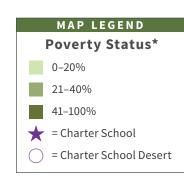
### Wyoming Charter School Deserts by the Numbers

% of the state population living in poverty	.10.9%
# of public elementary schools	230
# of charter schools	4
# of census tracts	132
# of charter school deserts	1
Approximate proportion of mid- to high-poverty census tracts that charter school deserts comprise	13%

Map 1 shows the census tracts and charter schools in Wyoming. Darker green highlights indicate areas in which more than 20 percent of the population lives in poverty. The statewide map depicts one charter school desert in a rural area in the southeast part of the state.

Map 1: Overview of charter school deserts in Wyoming





<sup>\*</sup>Percentage of the population within each tract that lives at or below the poverty line.

#### **Five Things to Keep in Mind**

Readers should note several points. First, we have not tried to describe, analyze, or infer how state policies may impact the distribution of charter schools in Wyoming—simply to show which high-poverty areas lack such schools. Second, although we focus on school locations, location alone is insufficient to ensure that families have viable access to schools. Nearby schools may not be available to families if they're filled to capacity, if policies prohibit transfer, or if transportation is unavailable. Third, some rural areas may lack charter schools simply because the population is too thin to support them. Fourth, our report does not address school quality, but the companion website allows users to view schools' math and English language arts proficiency data. Finally, visually identifying charter school deserts is inevitably vulnerable to human error, as they may be identified differently based on how contiguous census tracts are positioned and how "desert circles" are drawn.