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## Charter School Funding: Little Progress Towards Equity in the City

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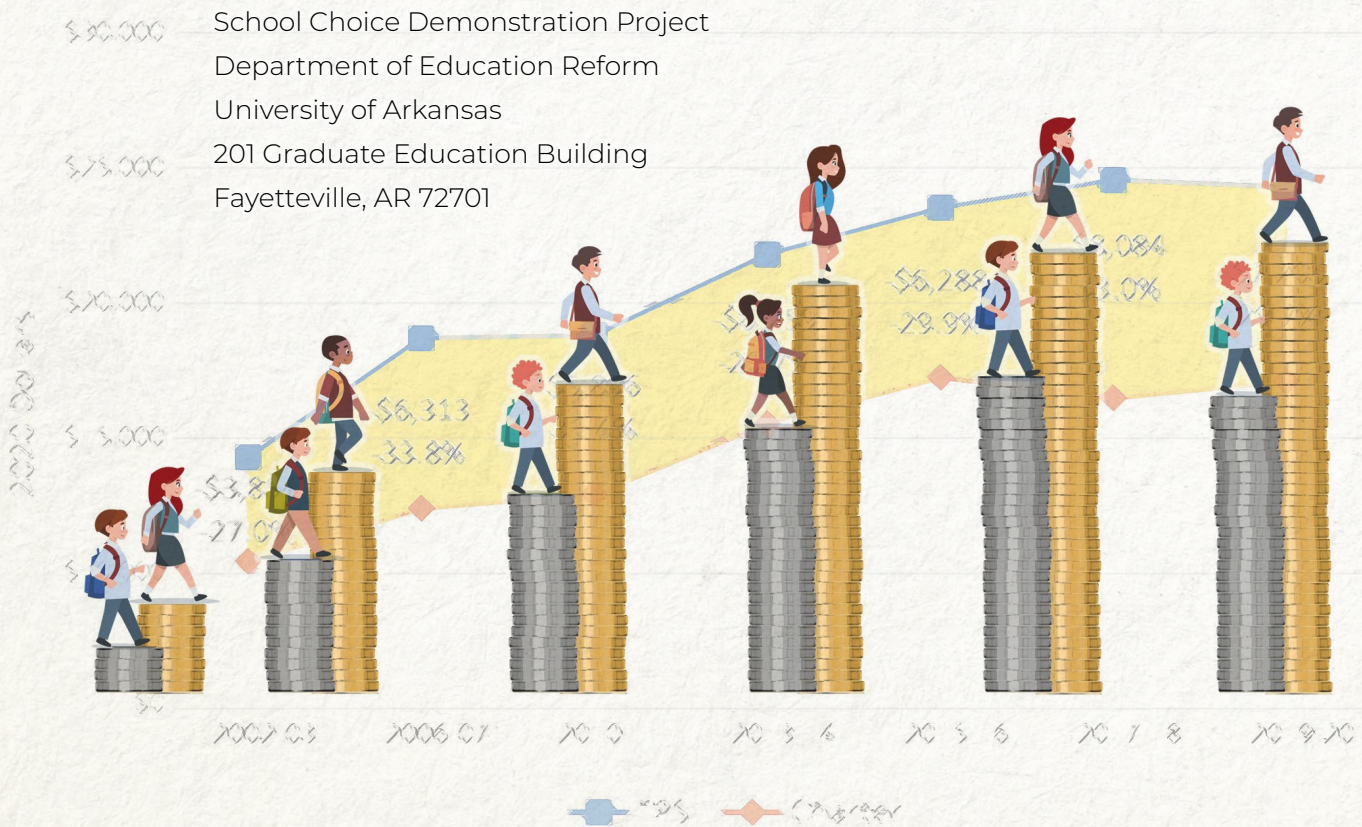
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August 2023

Updated December 2023\*



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<https://scdp.uark.edu/charter-school-funding-little-progress-towards-equity-in-the-city>

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# Executive Summary

Charter schooling has grown in popularity since the first charter school opened in St. Paul, Minnesota in 1992. Nearly 3.5 million students in the United States attended a public charter school in 2019-20. Our team has studied charter school funding equity since 2002-03 and most recently found that, in 2017-18, charter schools received, on average, 33 percent less funding than traditional public schools (TPS) in 18 cities, including Atlanta, Boston, Camden, Chicago, Denver, Detroit, Indianapolis, Houston, Little Rock, Los Angeles, Memphis, New Orleans, New York City, Oakland, Phoenix, San Antonio, Tulsa, and Washington, DC. Each of these cities either has a large charter sector or potential for significant charter growth. In this study, we examine charter school funding equity in those 18 cities using 2019-20 data, the most recent available. We use official school district and state budget documents to capture every dollar flowing to schools, including in-kind services. We answer the following questions: What is the difference in per-pupil revenue between TPS and charter schools in major US cities in the 2019-20 school year? Do differences in student demographics explain any funding differences between TPS and charter schools? Does the relationship between TPS and charter school funding vary across

categories of school revenue? Which cities are driving the results? We find that:

- On average, charter schools across 18 cities in 16 states in our analysis receive about 30 percent or \$7,147 (2020 dollars) less funding per pupil than TPS.
- The TPS-charter school funding disparity decreased by just over three percentage points from 2017-18 to 2019-20 (see Figure ESI), but the gap has been remarkably stable over our seven reports.
- Atlanta has the largest percentage-based charter funding disparity (about 53 percent), while Camden has the largest disparity in dollars (\$19,711). Houston has the smallest disparity in terms of percent (three percent) and dollars (\$417). Houston's funding gap is the only one favoring charter schools. Charter schools in Houston receive less public funding per pupil relative to TPS, even though charter schools serve more students

We examine charter school funding equity in those 18 cities using 2019-20 data, the most recent available.

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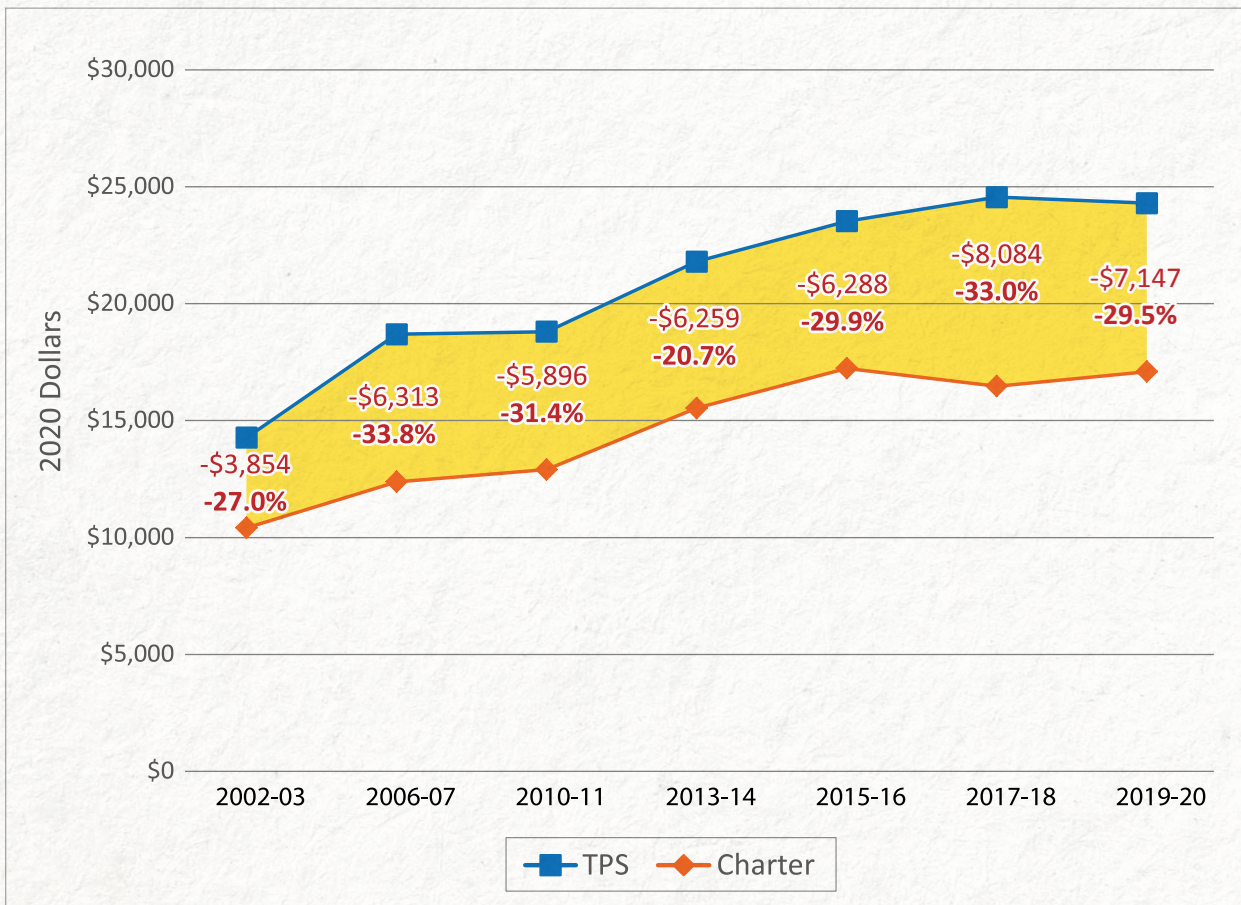
in poverty, but they receive more nonpublic funding per pupil.

- While we only give four cities (Houston, Memphis, Denver, and Boston) an A or B rating for charter school funding equity, several other cities showed marked improvement.
- Denver, which received an F in our last report, decreased its TPS-charter school funding disparity from 36 percent to eight percent between 2017-18 and 2019-20. The TPS-charter school funding disparity also decreased in Little Rock (by about 20 percentage points), Tulsa (about 18 percentage points),

Washington, DC (about 17 percentage points), Houston (about 14 percentage points), and Chicago (12 percentage points).

- However, the disparity also increased by about six percentage points in Detroit.
- We find evidence that the size of the overall funding gap is partially a function of differences between TPS and charter schools in terms of special education enrollment, but not students in poverty or English language learners. A sizable gap remains even when we control for student need. In Camden, Chicago, and Detroit, charter schools serve higher concentrations of students in poverty than

**Figure ES1: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in 18 US Cities – 2002-03 to 2019-20**



Note: We excluded New Orleans from our 18-city averages in 2013-14 and 2015-16 because the TPS per-pupil revenue was so high post-Hurricane Katrina that it would skew our across-city average.

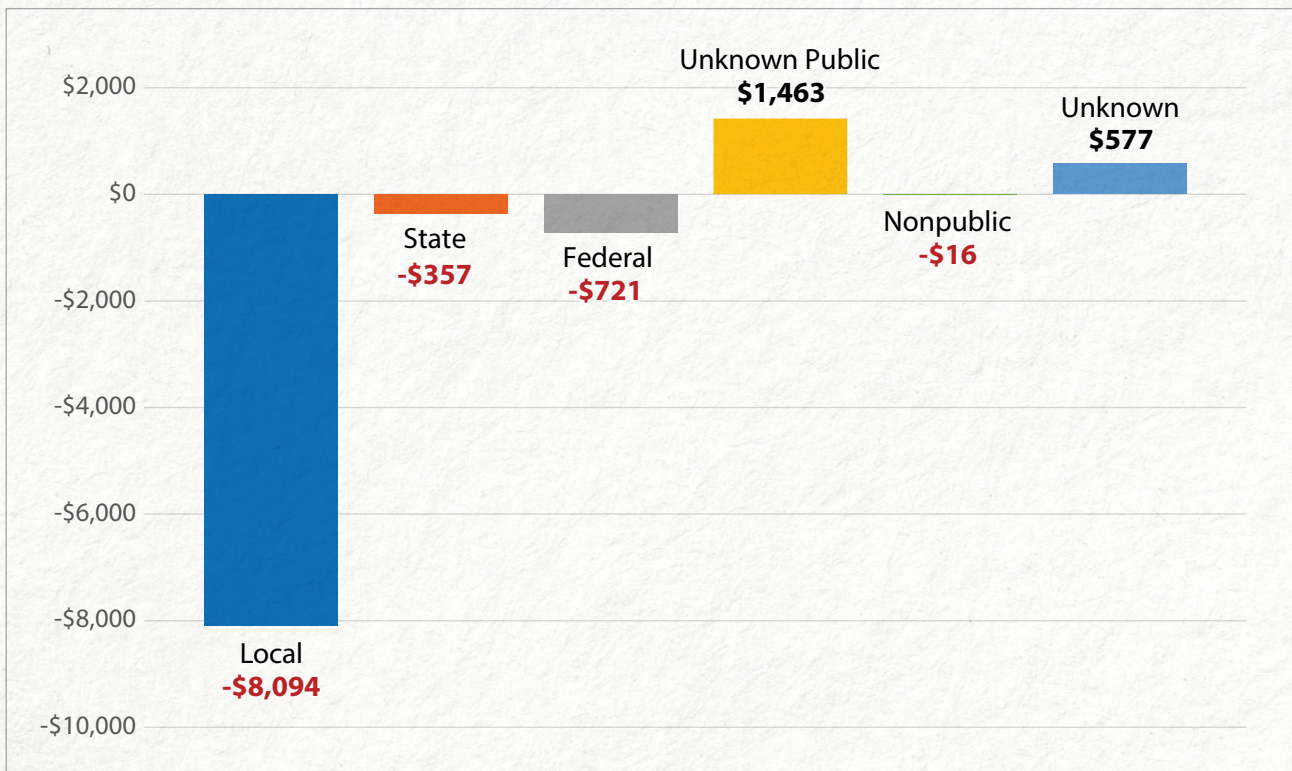
TPS but receive significantly less funding per pupil.

- In terms of funding sources, the largest disparity between TPS and charter schools in 2019-20 is in the local revenue category—an approximately 67 percent gap (about \$8,100 per pupil in 2020 dollars), favoring TPS (see Figure ES2). In 11 of the 18 cities, charter schools receive no local funds. On average, TPS also receive more state funding than charters--about \$360 or four percent more per pupil.

A sizable gap remains even when we control for student need.

In 11 of the 18 cities, charter schools receive no local funds.

Figure ES2: Average Disparity Per Pupil by Revenue Source for 18 US Cities – 2019-20



## Acknowledgements

We are grateful to those who made this project possible. We appreciate the guidance of Gary Larson, Angela Montagna, and the Larson Communications team in making this complicated information accessible to the public. We are thankful for the skill of Marlo Crandall of Remedy Creative in designing and formatting the report. We are grateful to the members of our advisory board who commented on an earlier draft of the report, including Ben DeGrow, Drew Jacobs, James Merriman, and Collin Miller. We thank the City Fund and the Walton Family Foundation for their grant support and acknowledge that the content of this report is entirely the responsibility of the authors and does not necessarily reflect the positions of the supporting Foundations, the University of Arkansas, or the University of Arkansas System.

# Charter School Funding: Little Progress Towards Equity in the City

## Introduction

In 2019-20, 27 years after the first charter school was founded in St. Paul, Minnesota, nearly 3.5 million students attended a public charter school in the United States,<sup>1</sup> representing nearly 7,700 schools<sup>2</sup> in 43 of the 50 states and Washington, DC.<sup>3</sup> That year, charter schools in the cities of Camden,<sup>4</sup> Detroit, Indianapolis, and Washington served over 40 percent of the public school student population. New Orleans was essentially an all-charter public school system, with only three traditional public schools (TPS) remaining<sup>5</sup> (representing less than one percent of all public school students) in the wake of school system reforms following Hurricane Katrina.

Charter schools are public schools that are granted more operational autonomy than TPS in return for a pledge to achieve certain academic performance goals, made through a contract or “charter” before a charter school authorizing body, which typically must be renewed every few years. Various entities can authorize charter schools, depending on the state, including school districts, state departments of education, independent authorizing boards, city governments, nonprofit organizations, or institutions of higher education.<sup>6</sup> Although some charter schools are still loosely managed by the school district, many are operated by independent school boards or educational groups such as charter management organizations.

Unlike most TPS, most charter schools do not require students to live in a designated residential zone to attend. When asked, parents say they value the ability to choose a different school for their child than the one to which they were residentially assigned.<sup>7</sup> In many states, oversubscribed charter schools are required to award seats by random lottery. Like TPS, charter schools cannot charge tuition or deny enrollment based on a student’s race or ethnicity, sex, religion, or disability. Additionally, charter schools must be nonreligious both in operation and affiliation.<sup>8</sup>

The autonomy charter schools enjoy allows them to innovate and better tailor the educational experience to serve their students’ unique needs and interests.<sup>9</sup> Compared to parents of TPS students, parents of charter school students generally report higher levels of satisfaction with their children’s schools.<sup>10</sup> Relative to similar TPS students, charter school students, on average, perform slightly better on standardized tests, graduate high school at higher rates, enroll in college at higher rates, and have more positive behavioral outcomes.<sup>11</sup> Charter schools appear to be especially effective in improving outcomes for Black and Hispanic students, students in poverty, and students with special needs.<sup>12</sup> The latest research on the effectiveness of charter schools, produced by Stanford University’s CREDO,<sup>13</sup> will inform the follow-up to this report focused on



charter school cost-effectiveness and productivity.

The presence of charter schools likely also pushes TPS to improve. Research indicates that when TPS face additional charter school competition, their students achieve better outcomes.<sup>14</sup> This “competitive effect” is especially strong in urban areas with large concentrations of Black and Hispanic students and students in poverty, where there is some evidence that charter sector growth has helped to narrow historic opportunity gaps.<sup>15</sup>

Despite the overall effectiveness of charter schools, our past research has demonstrated that charters tend to receive significantly less funding per pupil than TPS do, especially in urban areas. This gap has been relatively stable over time in terms of percent (although it has grown in constant dollars as TPS funding increases overall), most recently at 33 percent in 2017-18 on average in 18 major U.S. cities.<sup>16</sup>

In this study, we re-examine TPS and charter school funding in those 18 cities: Atlanta, Georgia; Boston, Massachusetts; Camden, New Jersey; Chicago, Illinois; Denver, Colorado; Detroit, Michigan; Houston, Texas; Indianapolis, Indiana; Little Rock, Arkansas; Los Angeles, California; Memphis, Tennessee; New Orleans, Louisiana; New York City, New York; Oakland, California; Phoenix, Arizona; San Antonio, Texas; Tulsa, Oklahoma; and Washington, DC. We seek to answer the following questions:

The latest research on the effectiveness of charter schools, produced by Stanford University’s CREDO, will inform the follow-up to this report focused on charter school cost-effectiveness and productivity.

1. What is the difference in per-pupil revenue between TPS and charter schools in major US cities in the 2019-20 school year?
2. Do differences in student demographics explain any funding differences between TPS and charter schools?
3. Does the relationship between TPS and charter school funding vary across categories of school revenue?
4. Which cities are driving the results?

In the following sections, we describe our methodology, explain our findings, and discuss implications for further research and policymaking.

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## Methodology

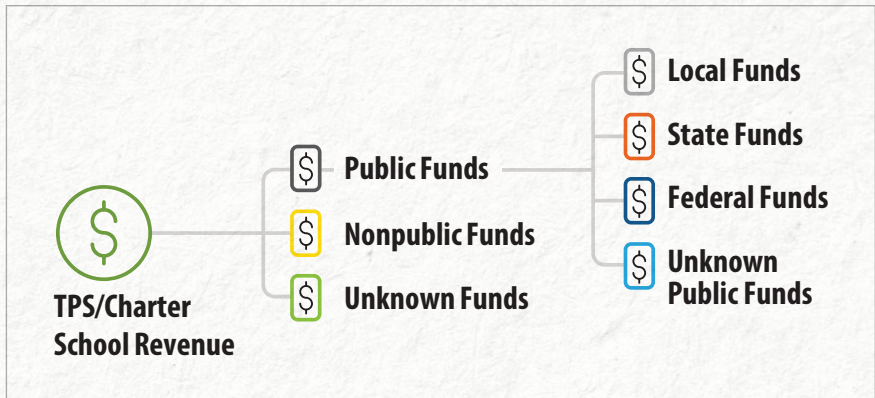
To collect the data for this analysis of charter school revenue in comparison to TPS revenue, we account for every dollar flowing to every TPS or charter school in each geographic area we study.<sup>17</sup> Some state funding may be allocated to TPS to “pass through” to charter schools. When this is the case, we ensure pass-through funds are correctly attributed to the charter

school sector, since it enrolls the students who ultimately benefited from the dollars. Additionally, TPS often share non-monetary resources with charter schools such as facilities, special education services, food services, or transportation services. We attempt to capture and include all in-kind services in our revenue totals, assigning them to the charter sector when those schools ultimately benefit. We exclude any bond revenue or other revenue sources that must be repaid.<sup>18</sup>

Once we have captured all revenue flowing to schools, we categorize it as we have in past reports (see Figure 1). If we know the source of the funds, we categorize it as public or nonpublic. If we do not know the source, we categorize it as unknown. We categorize public funds as local, state, federal, or unknown public funds. The specific explanations for these funding categorizations are listed below:

- **Local**—funds whose origins are local taxes and usage fees. The most common local source is property taxes, but local funds may also include other sources of revenue such as sales taxes, per-capita taxes, and local voter-approved taxes to service bonds.
- **State**—funds whose origins are state taxes and public licensing and usage fees. These funds may originate from sales taxes, property taxes, licensing fees, auto registrations, lotteries, or any other state source.

Figure 1: Revenue Categorizations



- **Federal**—funds whose origins are federal taxes and public usage fees. These funds may include federal impact aid, Title I, mineral rights and access payments, federal charter school startup funding, American Recovery and Reinvestment Act funds, federal “State Fiscal Stabilization Fund” grants, and any other obviously federal funding.
- **Unknown Public**—funds from public taxation which, due to vagueness in the state’s accounting, cannot be determined to be from a federal, state, or local source. We also categorize in-kind services as unknown public revenue—positive revenue for charter schools and negative revenue for TPS.
- **Nonpublic**—funds from non-tax, nonpublic sources. These funds include gate receipts, meal sales, philanthropy, fundraising, rental charges, interest on bank accounts and investments, and any other non-tax funding.
- **Unknown Funds**—if the sources’ financial details (typically charter schools’ financial ledgers) lack sufficient specificity to classify a funding item into any of the other five source classifications, then that funding item is classified as unknown.

# Results

Note: All 18-city tables and figures for 2019-20 include New Orleans in the charter category, but not the TPS category, because we consider the city to be charter-only. We exclude New Orleans from all city-level tables and figures because we do not make a TPS-charter school comparison for the city.

## Demographics

First, we examine differences in demographic characteristics between the TPS and charter school sectors in each of the 18 cities (see Table 1). We find large differences in several cities. In three cities, charter schools serve significantly fewer students in poverty than TPS: about 18

percentage points less in Atlanta, 16 percentage points in Tulsa, and 10 percentage points in Little Rock. However, in three other cities, charter schools serve significantly more students in poverty than TPS: about 34 percentage points more in Camden and 11 percentage points more

**Table 1: Demographic Characteristics by Sector in 18 U.S. Cities – 2019-20**

City	Overall Enrollment		Poverty		ESL		SPED	
	Total Public School Enrollment	Students Attending Charter	TPS	Charter	TPS	Charter	TPS	Charter
Atlanta	64,984	36.3%	<b>77.3%</b>	<b>59.2%</b>	4.5%	0.3%	<b>12.6%</b>	<b>3.8%</b>
Boston	65,084	22.4%	58.3%	53.9%	<b>32.4%</b>	<b>15.3%</b>	21.3%	18.5%
Camden	16,954	59.2%	<b>56.4%</b>	<b>90.3%</b>	12.5%	10.0%	17.8%	13.7%
Chicago	344,801	16.5%	<b>78.8%</b>	<b>88.4%</b>	21.0%	16.4%	18.2%	18.1%
Denver	92,772	23.4%	<b>61.0%</b>	<b>71.6%</b>	29.1%	37.3%	19.6%	16.9%
Detroit	87,421	41.8%	<b>81.5%</b>	<b>90.3%</b>	11.4%	10.1%	14.5%	9.6%
Houston	249,771	15.9%	<b>79.1%</b>	<b>89.6%</b>	33.9%	32.3%	8.1%	7.1%
Indianapolis	51,118	49.9%	<b>66.0%</b>	<b>73.5%</b>	<b>21.9%</b>	<b>10.8%</b>	17.1%	14.6%
Little Rock	30,142	28.8%	<b>76.3%</b>	<b>66.3%</b>	<b>16.6%</b>	<b>10.1%</b>	15.4%	11.4%
Los Angeles	600,860	19.6%	78.9%	77.0%	19.7%	19.3%	14.6%	10.6%
Memphis	116,238	23.6%	55.0%	60.1%	12.0%	9.5%	11.7%	9.4%
New Orleans	50,766	100.0%	n/a	81.5%	n/a	6.9%	n/a	12.6%
New York City	1,054,562	11.8%	<b>74.4%</b>	<b>80.1%</b>	<b>14.6%</b>	<b>6.8%</b>	<b>24.8%</b>	<b>18.7%</b>
Oakland	52,917	31.7%	70.9%	66.7%	32.8%	28.2%	14.1%	10.4%
Phoenix	363,597	13.4%	<b>52.9%</b>	<b>47.1%</b>	10.6%	10.9%	12.0%	8.6%
San Antonio	60,341	19.6%	<b>89.3%</b>	<b>82.3%</b>	20.7%	19.0%	12.3%	8.8%
Tulsa	40,109	11.1%	<b>75.5%</b>	<b>59.4%</b>	<b>24.2%</b>	<b>17.9%</b>	16.4%	12.9%
Washington, DC	93,963	46.0%	42.7%	40.7%	<b>15.7%</b>	<b>7.9%</b>	15.5%	14.5%
<b>Total</b>	<b>3,436,400</b>	<b>19.9%</b>	<b>72.0%</b>	<b>73.5%</b>	<b>18.1%</b>	<b>13.9%</b>	<b>17.8%</b>	<b>13.0%</b>

Note: For the purposes of our analysis, New Orleans is a charter school-only city because in 2019-20, the TPS sector served less than one percent of all students in public schools in the city; thus “n/a” = “not applicable.” Red, bolded text indicates the difference between the sectors is greater than five percentage points. Atlanta charter school enrollment includes 11,790 Georgia Cyber Academy students.

in Denver and Houston. In Boston and Indianapolis, TPS serve 17 and 11 percentage points more English language learners (ELLs) than charter schools, respectively. For 16 cities, special education enrollment is similar for both populations, with TPS tending to enroll slightly higher percentages of students with disabilities compared to charters. The exceptions are in Atlanta, where TPS serve about nine percentage points more special education students, and New York City, where TPS serve six percentage points more special education students.

In Camden, the smallest city in our analysis in terms of students, with 17,000 enrolled in public schools, about 60 percent of students attend a charter school. Charter schools serve a near-majority of public school students in Indianapolis and Washington, D.C. (49 and 46 percent in 2019-20, respectively). In terms of number of students, the largest charter sectors in the US and our analysis are in New York City (about 124,500

students) and Los Angeles (about 117,600 students).

In 2019-20, TPS served less than one percent of the public school student population in New Orleans. Of the three remaining public school entities, one was in the

process of transitioning to a charter school, another was located in a correctional center, and the third was the New Orleans Public Schools central office, representing 185 students unassigned to a school location. Therefore, for the purposes of this analysis, although we include revenue for every student in the city of New Orleans, we consider New Orleans to be an all-charter city. All funds and all students are assigned to the charter sector. Although we cannot

make a within-city TPS-charter school comparison, we examine how charter school funding in New Orleans compares to the funding of charter schools and TPS in other cities in a later section, as well as how it has changed over time (see Appendix B).

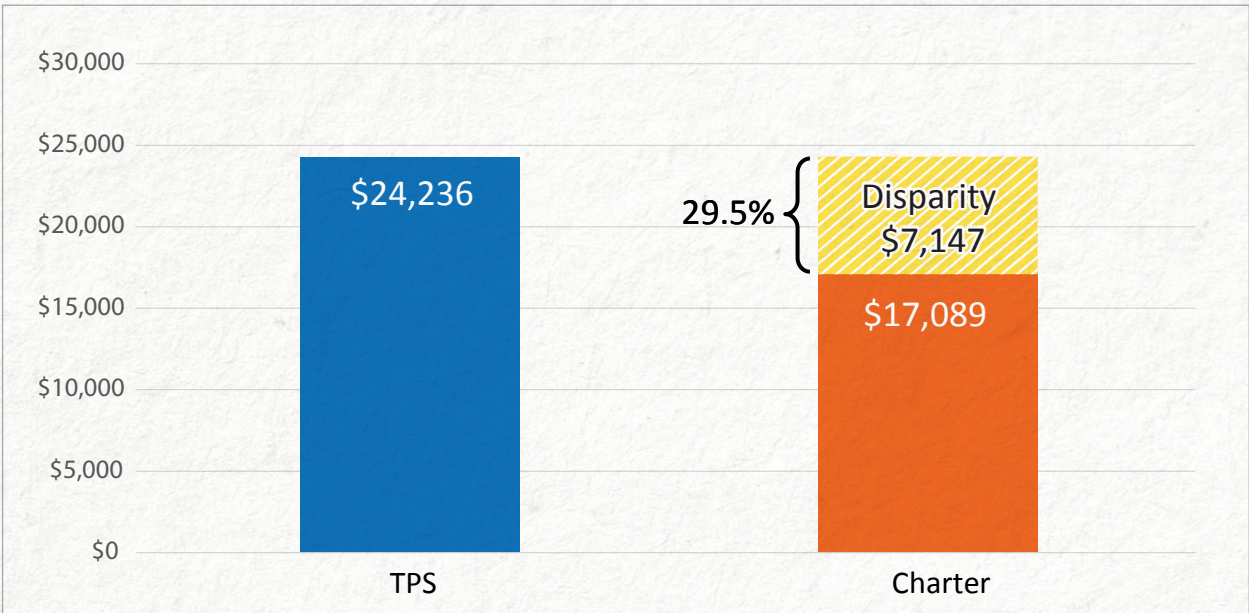
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## Overall Disparity

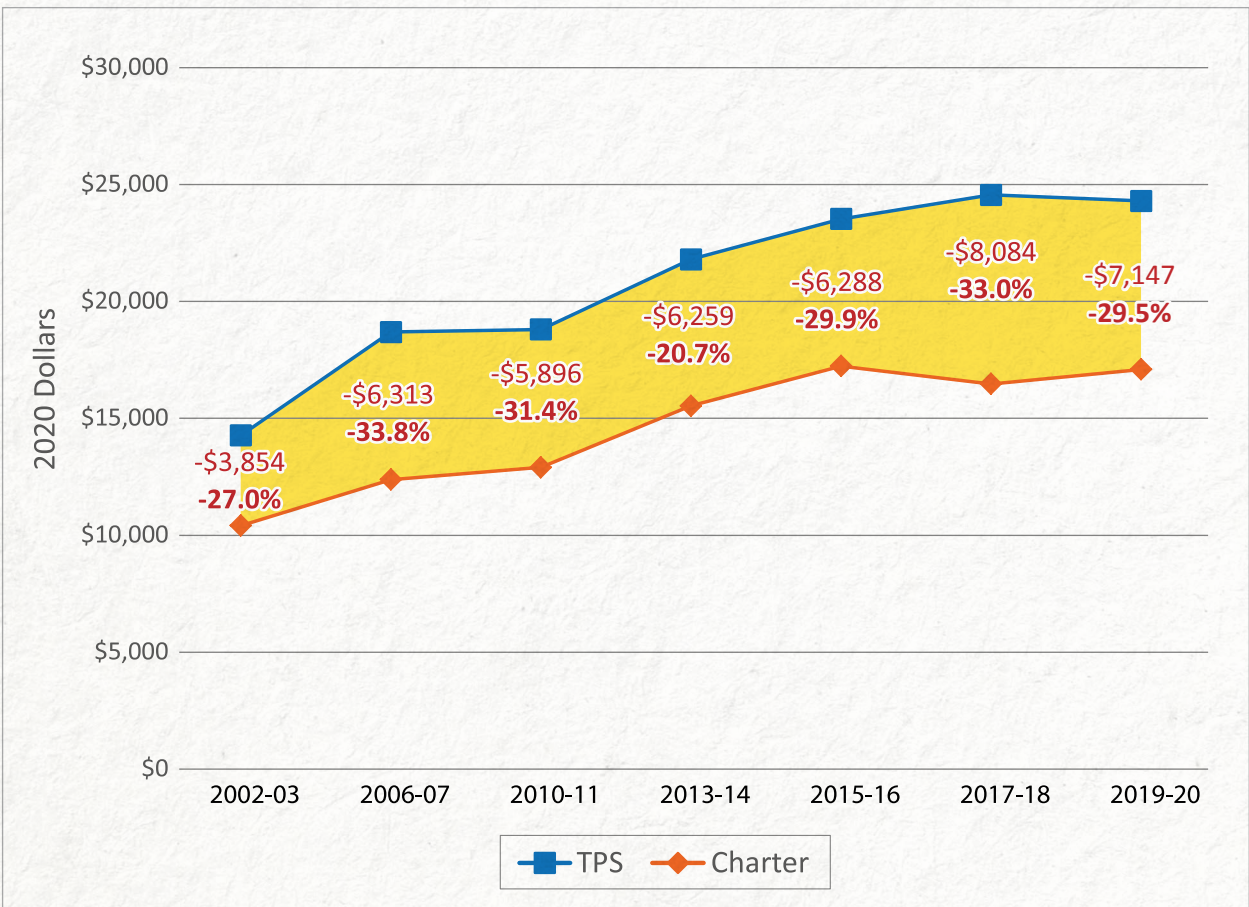
In 2019-20, students in charter schools across the 18 cities in our analysis received about 30 percent less in funding than students in TPS, a student-weighted average funding gap of \$7,147 (see Figure 2). This gap has stayed relatively stable over time (see Figure 3).<sup>19</sup>

**In 2019-20, students in charter schools across the 18 cities in our analysis received about 30 percent less in funding than students in TPS.**

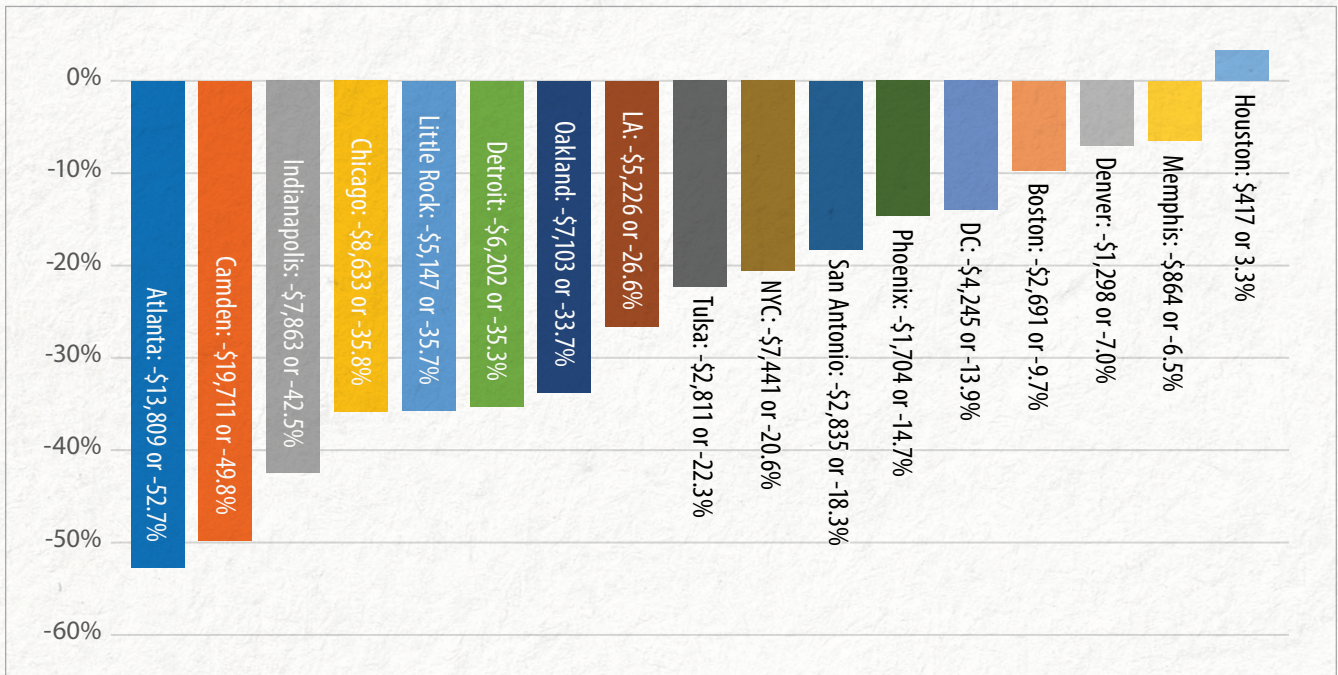
**Figure 2: Average Per-Pupil Funding for 17 U.S. Cities – 2019-20**



**Figure 3: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in 18 US Cities – 2002-03 to 2019-20**



**Figure 4: Average Funding Disparities Between TPS and Charter Schools in 17 US Cities – 2019-20**



## City-Level Disparities

The largest city-level disparity in 2019-20, in terms of percent difference, is in Atlanta, Georgia, where TPS received about 53 percent more funding per pupil than charter schools.<sup>20</sup> In terms of 2020 dollars, the largest disparity is in Camden, New Jersey, where TPS receive \$19,711 more per pupil than charter schools (see Figure 4). The smallest gap in terms of both dollars and percent difference is in Houston, Texas, where charters receive \$417 or about three percent more per pupil than TPS do. Memphis, Denver, and Boston have relatively small TPS-charter school funding disparities, with just under a seven percent (about \$846) gap in Memphis, a seven percent (about \$1,300) gap in Denver, and approximately a 10 percent (about \$2,700) gap in Boston, all three favoring TPS. Denver has made great strides in improving charter school funding equity, decreasing the

disparity from about 36 percent to about eight percent from 2017-18 to 2019-20. Part of the change was because of bond revenue received by Denver TPS in 2017-18 but not in 2019-20.

The smallest gap in terms of both dollars and percent difference is in Houston, Texas.

The largest city-level disparity in 2019-20, in terms of percent difference, is in Atlanta, Georgia.

Other factors that decreased the Denver charter school funding gap included increased direct payments from the state to charters and more in-kind services provided by the TPS to the charter sector, all accounted for in our calculations.

Based on these percentage differences, we grade each city's charter school funding equity (see Table 2). Charter school funding equity is graded at an A in Houston, a B in Memphis, Denver, and Boston, a C in Washington, DC and Phoenix, a D in San Antonio, New York City, and Tulsa, and an F in all other cities.

Next, we examine funding disparities in light of differences between the TPS and charter

school sectors in student needs measured by poverty, ELL status, and special education status. This is important because both TPS and charter school funding often is at least partially determined through a formula which weights funding allocations by student need. In theory, a student's public school will receive the same amount of funds to accommodate their needs, regardless of whether it is a TPS or charter school. When TPS serve more students

**Table 2: Total Revenue Disparity Per Pupil – 2019-20**

Grade	City	State	Avg. TPS Per-Pupil Revenue	Avg. Charter Per-Pupil Revenue	Avg. Disparity Per Pupil (\$)	Avg. Disparity Per Pupil (%)	TPS-Charter Sector Balance in Terms of Student Need
A	Houston	TX	\$12,552	\$12,969	\$417	3.3%	Charters Higher Poverty
B	Memphis	TN	\$13,111	\$12,265	-\$846	-6.5%	Balance (Diff < 5% pts.)
B	Denver	CO	\$18,459	\$17,161	-\$1,298	-7.0%	Charters Higher Poverty
B	Boston	MA	\$27,852	\$25,161	-\$2,691	-9.7%	TPS More ELLs
C	Washington	DC	\$30,517	\$26,272	-\$4,245	-13.9%	TPS More ELLs
C	Phoenix	AZ	\$11,609	\$9,905	-\$1,704	-14.7%	TPS Higher Poverty
D	San Antonio	TX	\$15,514	\$12,678	-\$2,835	-18.3%	TPS Higher Poverty
D	New York City	NY	\$36,126	\$28,792	-\$7,334	-20.3%	Charters More Poverty, TPS More ELLs/SPED
D	Tulsa	OK	\$12,582	\$9,770	-\$2,811	-22.3%	TPS Higher Poverty, More ELLs
F	Los Angeles	CA	\$19,630	\$14,405	-\$5,226	-26.6%	Balance (Diff < 5% pts.)
F	Oakland	CA	\$21,062	\$13,959	-\$7,103	-33.7%	Balance (Diff < 5% pts.)
F	Detroit	MI	\$17,569	\$11,367	-\$6,202	-35.3%	Charters Higher Poverty
F	Little Rock	AR	\$14,426	\$9,279	-\$5,147	-35.7%	TPS Higher Poverty, More ELLs
F	Chicago	IL	\$24,086	\$15,453	-\$8,633	-35.8%	Charters Higher Poverty
F	Indianapolis	IN	\$18,511	\$10,648	-\$7,863	-42.5%	Charters More Poverty, TPS More ELLs
F	Camden	NJ	\$39,611	\$19,900	-\$19,711	-49.8%	Charters Higher Poverty
F	Atlanta	GA	\$26,203	\$12,394	-\$13,809	-52.7%	TPS Higher Poverty, More SPED
N/A	New Orleans	LA	N/A	\$12,026	N/A	N/A	Charters Only
<b>Weighted Average</b>			<b>\$24,236</b>	<b>\$17,089</b>	<b>-\$7,147</b>	<b>-29.5%</b>	N/A

Note: the letter grades reflect the size of the unadjusted funding disparity in terms of percent. In absolute values, the following ranges apply: 0-5% = A; 6-10% = B; 11-15% = C; 16-25% = D; 26% or greater = F.

with higher needs, we would expect them to receive more funding per pupil than charter schools, and vice versa. When the two sectors serve nearly identical student populations in terms of those needs, we would expect funding to be roughly equal. However, the funding disparities in the cities in our analysis do not follow this pattern of correlation to levels of student need (see Table 2). In these cities, there are other factors contributing to funding disparities which should be addressed to achieve funding parity.

For example, Camden (which has about a 50 percent funding disparity), Indianapolis (about a 43 percent disparity), Chicago (about a 36 percent disparity), and Detroit (about a 35 percent disparity) are all rated F in terms of funding disparities favoring TPS, despite charter schools in these cities serving more students in poverty than TPS in these cities do. In these cities, funding disparities would likely be even wider if we held student need constant. In addition, Oakland and Los Angeles, which serve roughly balanced populations in terms of student needs, nevertheless have about a 34 percent and

## The funding disparities in the cities in our analysis do not follow this pattern of correlation to levels of student need.

27 percent funding disparity in 2019-20, respectively.

The large funding disparities for Atlanta, Little Rock, Tulsa, and San Antonio might close to some degree, although likely not very much, if we held student characteristics constant. These differences between sector populations do not exceed 18 percentage points, and most of the sector imbalances are in the five to 10 percentage point range (see Table 1). The higher shares of high-need students in TPS in Phoenix, Washington, DC, and Boston could potentially explain the smaller disparities in those cities. In New York City, charter schools serve more students in poverty (about six percentage points more), but TPS serve about eight and six percentage points more students with ELL and special education designations, respectively.

To examine systematically whether differences in student demographics between the TPS and charter school sectors in each city are correlated to

disparities between TPS and charter school funding, we run a regression analysis using city-level data.<sup>21</sup> We find that, controlling for percentages of students in poverty and ELLs, the disparity is essentially unchanged. Controlling for the percentage of students in special education reduces the disparity by 68 percent (to about \$1,707), though that factor is imprecisely estimated.<sup>22</sup> These results suggest that while some of the funding disparity, on average, is explained by differences in student need between TPS and charter schools, the gap cannot be wholly explained by these differences. At the city level, special education enrollment likely has a wide range of levels of explanatory power, since in 15 out of 18 cities (excluding Atlanta, New York City, and New Orleans), TPS and charter schools serve similar percentages of students with special needs, yet there is a wide range of TPS-charter school funding disparities among those cities.



**Table 3: Linear Regression Results**

	(1)	(2)	(3)	(4)
<b>Charter</b>	-\$5,393*** (\$1,006)	-\$5,363*** (\$1,014)	-\$5,154*** (\$1,070)	-\$1,707 (\$2,528)
<b>FRL (%)</b>		-\$139 (\$1,343)	\$69 (\$1,515)	-\$825 (\$1,131)
<b>ELL (%)</b>			\$693 (\$1,345)	\$1000 (\$973)
<b>SPED (%)</b>				\$8,625* (\$4,646)
<b>Constant</b>	\$31,141*** (\$6,861)	\$31,614*** (\$5,608)	\$29,805*** (\$7,364)	\$18,616 (\$11,249)
<b>Observations</b>	35	35	35	35
<b>R-squared</b>	0.981	0.981	0.981	0.987

Robust standard errors are in parentheses. \*\*\* p<.01, \*\* p<.05, \* p<.1. Regressions include state fixed effects. Observations (TPS or charter sector in each city) weighted by student enrollment. "FRL" is "Free- and Reduced-Price Lunch." "ELL" is "English Language Learner." "SPED" is "Special Education." For FRL, ELL, and SPED, the coefficient corresponds to a 10 percentage point increase in percent of students who fall into each category.

## Disparities by Funding Source

Next, we examine whether disparities vary by funding source (see Table 4 and Figure 5). Weighted by enrollment, the average disparity between TPS and charter school local revenue is \$8,094 or about 67 percent, favoring TPS. This gap is much smaller for state, federal, and nonpublic funding—only \$357 or about 4 percent for state, \$721 or about 38 percent for federal, and \$16 or two percent for nonpublic, all favoring TPS. Charter schools receive more unknown public (\$1,463) and unknown (\$577) funds. Because our analysis captures in-kind services, which we express as a credit to charter schools and a debit to TPS, on average, TPS lose \$230 per pupil and charter schools receive \$1,233

The average disparity between TPS and charter school local revenue is \$8,094 or about 67 percent, favoring TPS.

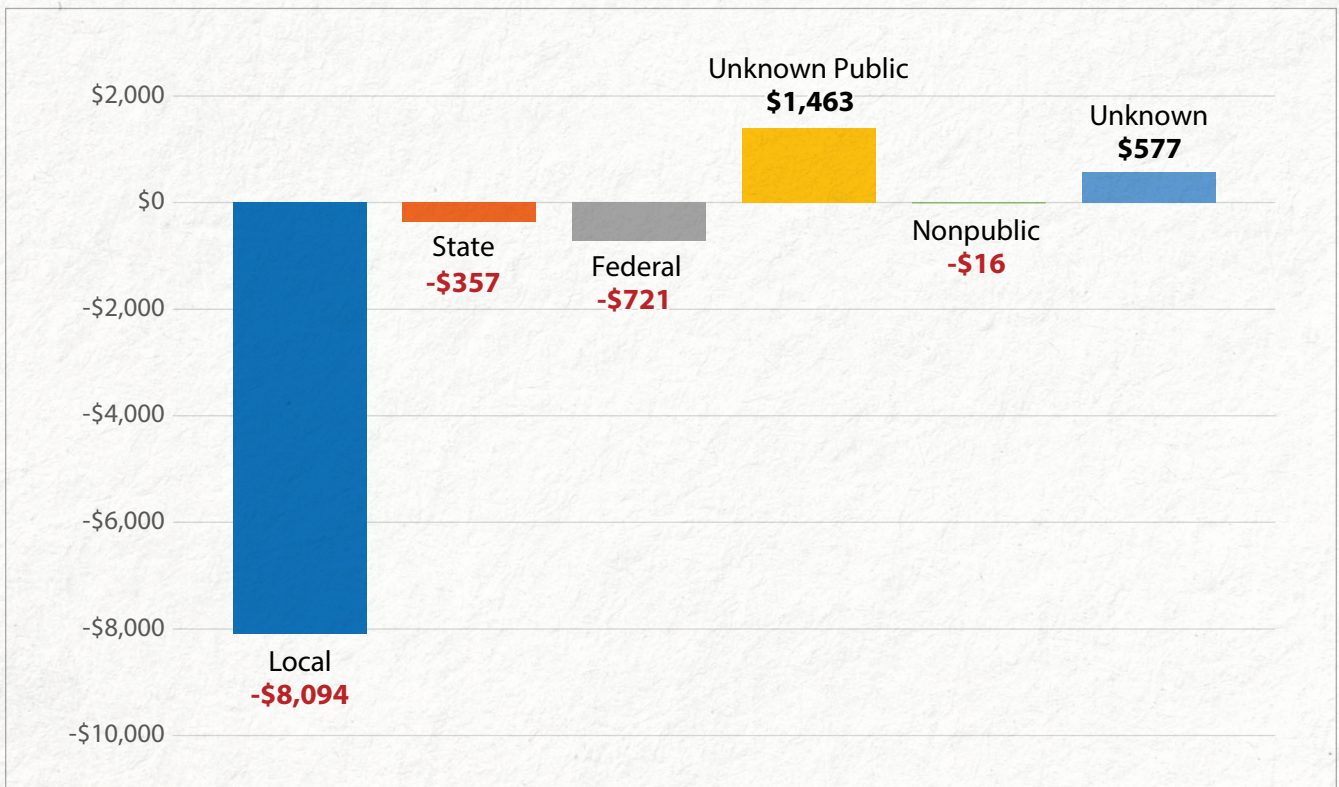
Overall, TPS receive \$7,767 more per pupil in public funds; relative to charter schools.

per pupil in unknown public funds, leading to a gap of \$1,463 for that revenue category. Overall, TPS receive \$7,710 more per pupil in public funds, relative to charter schools (see Figure 6).<sup>23</sup>

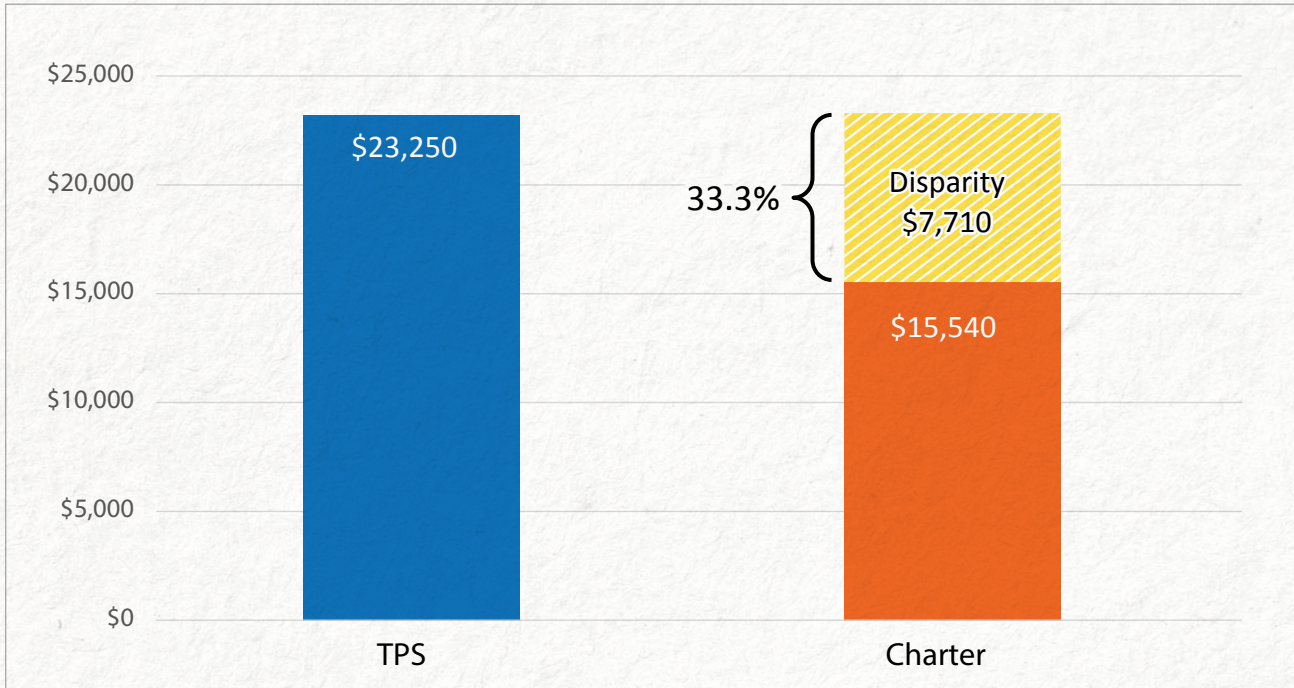
**Table 4: Average Revenue Per Pupil by Source for 18 US Cities – 2019-20**

Revenue Category	Avg. TPS Per-Pupil Revenue	TPS % of Total	Avg. Charter Per-Pupil Revenue	Charter % of Total	Avg. Disparity Per Pupil (\$)	Avg. Disparity Per Pupil (%)
Local	\$12,181	50.3%	\$4,086	23.9%	<b>-\$8,094</b>	<b>-66.5%</b>
State	\$9,397	38.8%	\$9,040	52.9%	<b>-\$357</b>	<b>-3.8%</b>
Federal	\$1,902	7.8%	\$1,181	6.9%	<b>-\$721</b>	<b>-37.9%</b>
Unknown Public	-\$230	-0.9%	\$1,233	7.2%	\$1,463	636.1%
Nonpublic	\$921	3.8%	\$905	5.3%	<b>-\$16</b>	<b>-1.7%</b>
Unknown	\$66	0.3%	\$643	3.8%	\$577	875.9%
<b>Total</b>	<b>\$24,236</b>	<b>100.0%</b>	<b>\$17,089</b>	<b>100.0%</b>	<b>-\$7,147</b>	<b>-29.5%</b>

**Figure 5: Average Disparity Per Pupil by Revenue Source in 18 US Cities – 2019-20 School Year**



**Figure 6: Average Public Per-Pupil Funding in 18 US Cities – 2019-20**



We then examine the disparities by source by city, beginning with public funding. Figure 7 shows the overall public funding disparities by city and Table 5 shows these disparities disaggregated by local, state, federal, and unknown public funding. Overall, the largest public funding disparity in 2019-20 is in Camden, where TPS received nearly \$20,000 more per pupil relative to charter schools (see Figure 7 and Table 5). Notably, charter schools receive local funding only in Camden, Denver, Detroit, Los Angeles, New York City, and Oakland, and only in Camden do they receive more local funding than TPS. The largest local funding disparity is in Boston, where TPS receive nearly \$20,000 per pupil in local funds and charter schools receive none. Both TPS and charter schools in Washington, DC receive no

The largest public funding disparity in 2019-20 is in Camden, where TPS received nearly \$20,000 more per pupil relative to charter schools.

local funds, receiving state funds instead.<sup>24</sup> All TPS and charter schools in all 18 cities in our analysis receive state funds. The largest state funding disparity is in Camden, where TPS receive over \$40,000 more per pupil than charter

The largest local funding disparity is in Boston.

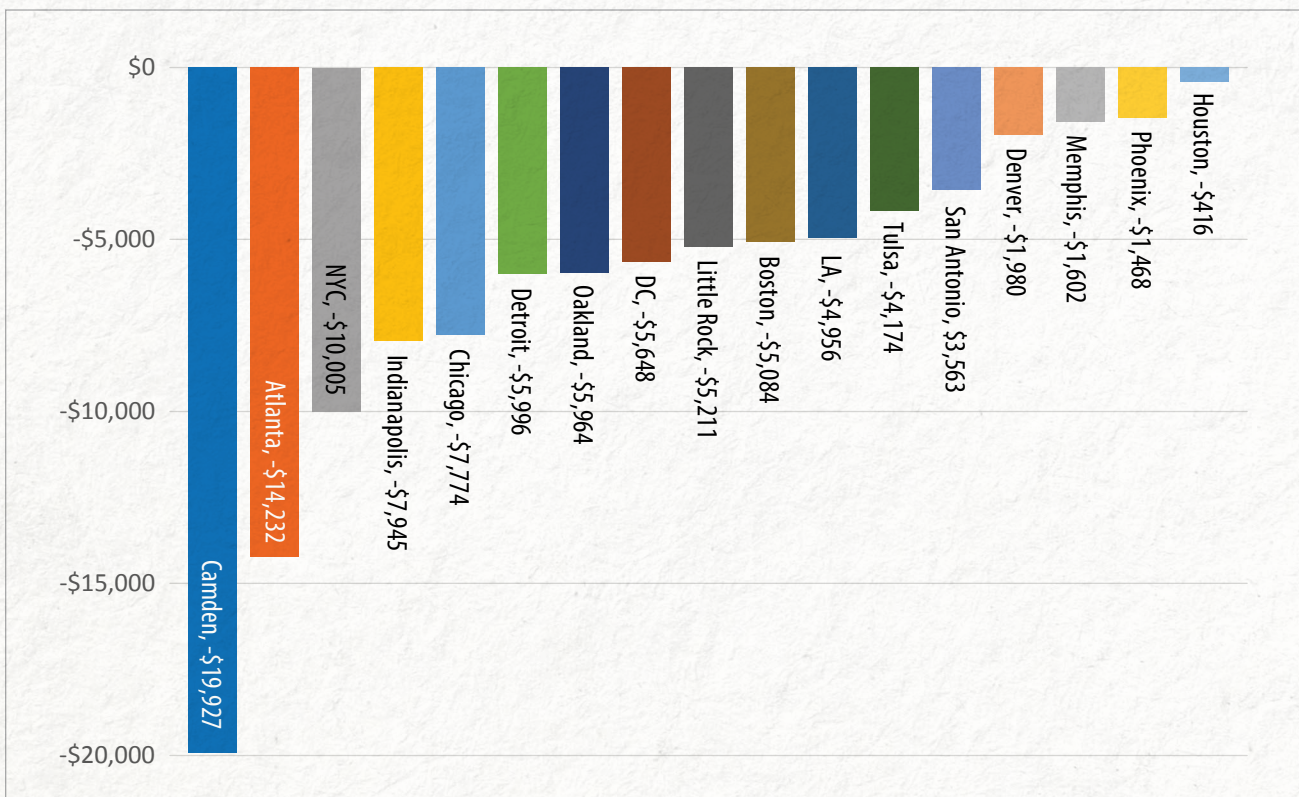
schools. Charter schools in nine of the 17 cities receive more state funds per pupil than TPS. In terms of federal funds, the largest disparities,

favoring TPS, are in Detroit (over \$3,200) and Camden (over \$2,800). Only in one city, Phoenix, do charter schools receive more federal funding (\$223 per pupil) than TPS. The overall average per-pupil amount of unknown public funding for charter schools is positive relative to TPS because this is the category in which we include any in-kind services offered by TPS to charter schools (see Figure 5). Charter schools receive anywhere from \$215 (in Phoenix) less than to \$21,631 (in Camden) more unknown public funds per pupil, relative to TPS. This large disparity in Camden

The largest state funding disparity is in Camden, where TPS receive over \$40,000 more per pupil than charter schools.

is due to TPS receiving pass-through funds that ultimately find their home in charter and other nontraditional public schools, resulting in a large negative revenue per pupil for TPS in the unknown public category.

**Figure 7: Public Funding Disparities Between TPS and Charter Schools in 17 US Cities – 2019-20**

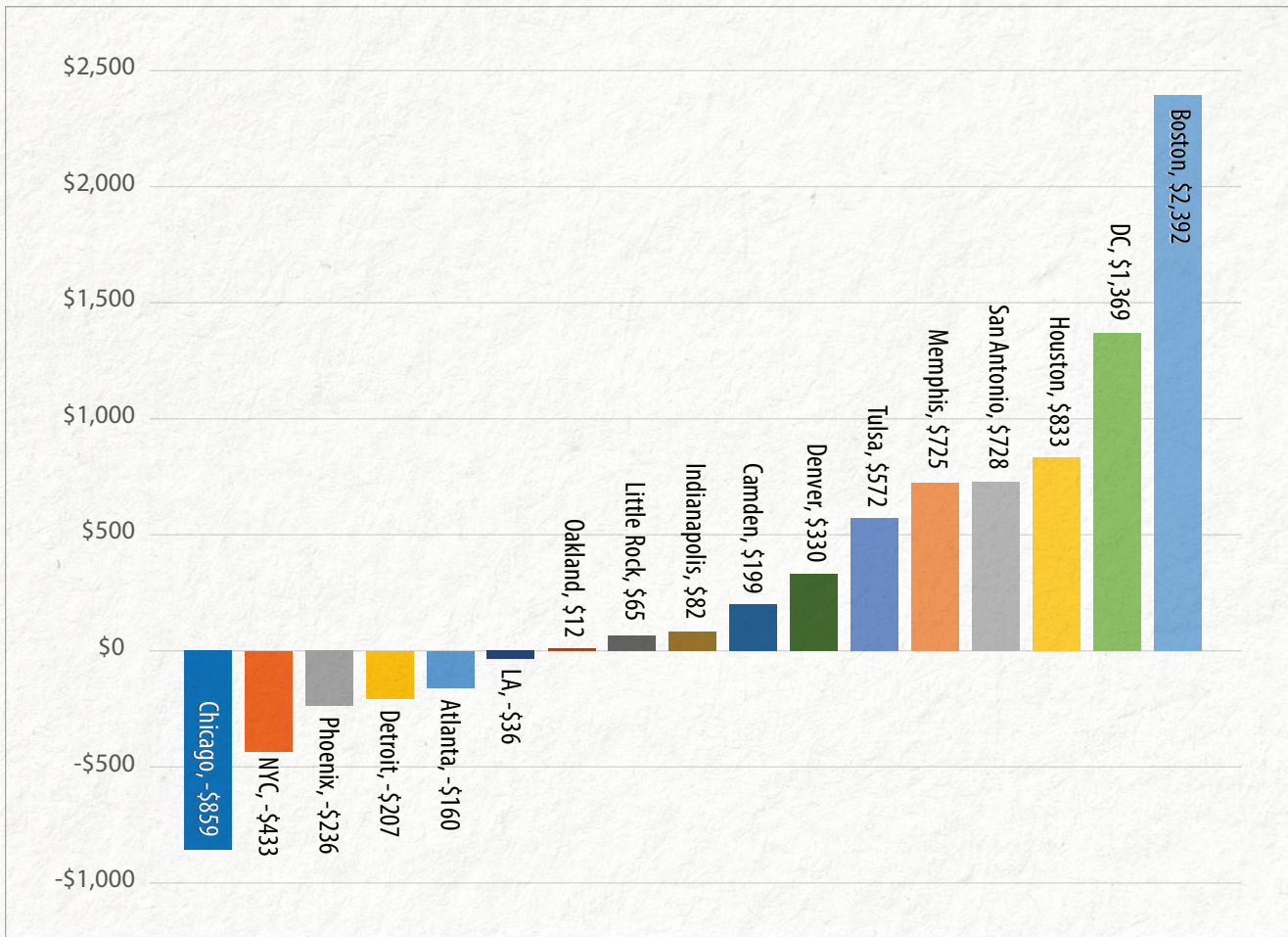


**Table 5: Public Funding Disparities in 17 US Cities – 2019-20**

City	Local Disparity	State Disparity	Federal Disparity	Unknown Public Disparity	Total Public Disparity
Atlanta	<b>-\$18,328</b>	\$1,517	<b>-\$996</b>	\$3,575	<b>-\$14,232</b>
Boston	<b>-\$19,951</b>	\$12,070	<b>-\$322</b>	\$3,120	<b>-\$5,084</b>
Camden	\$2,198	<b>-\$40,911</b>	<b>-\$2,844</b>	\$21,631	<b>-\$19,927</b>
Chicago	<b>-\$11,382</b>	\$3,436	<b>-\$1,688</b>	\$1,860	<b>-\$7,774</b>
Denver	<b>-\$13,195</b>	\$7,561	<b>-\$959</b>	\$4,613	<b>-\$1,980</b>
Detroit	<b>-\$1,116</b>	<b>-\$1,666</b>	<b>-\$3,214</b>	\$0	<b>-\$5,996</b>
Houston	<b>-\$9,191</b>	\$8,953	<b>-\$178</b>	\$0	<b>-\$416</b>
Indianapolis	<b>-\$6,586</b>	<b>-\$818</b>	<b>-\$541</b>	\$0	<b>-\$7,945</b>
Little Rock	<b>-\$7,937</b>	\$3,728	<b>-\$933</b>	<b>-\$69</b>	<b>-\$5,211</b>
Los Angeles	<b>-\$1,945</b>	<b>-\$2,903</b>	<b>-\$1,139</b>	\$1,030	<b>-\$4,956</b>
Memphis	<b>-\$5,384</b>	<b>-\$6,598</b>	<b>-\$739</b>	\$11,119	<b>-\$1,602</b>
New York City	<b>-\$4,523</b>	<b>-\$6,095</b>	<b>-\$888</b>	\$1,501	<b>-\$10,005</b>
Oakland	<b>-\$4,642</b>	<b>-\$325</b>	<b>-\$1,262</b>	\$265	<b>-\$5,964</b>
Phoenix	<b>-\$5,353</b>	\$3,878	\$223	<b>-\$215</b>	<b>-\$1,468</b>
San Antonio	<b>-\$6,180</b>	\$4,120	<b>-\$1,503</b>	\$0	<b>-\$3,563</b>
Tulsa	<b>-\$5,658</b>	\$1,619	<b>-\$135</b>	\$0	<b>-\$4,174</b>
Washington, DC	\$0	<b>-\$5,161</b>	<b>-\$483</b>	<b>-\$3</b>	<b>-\$5,648</b>

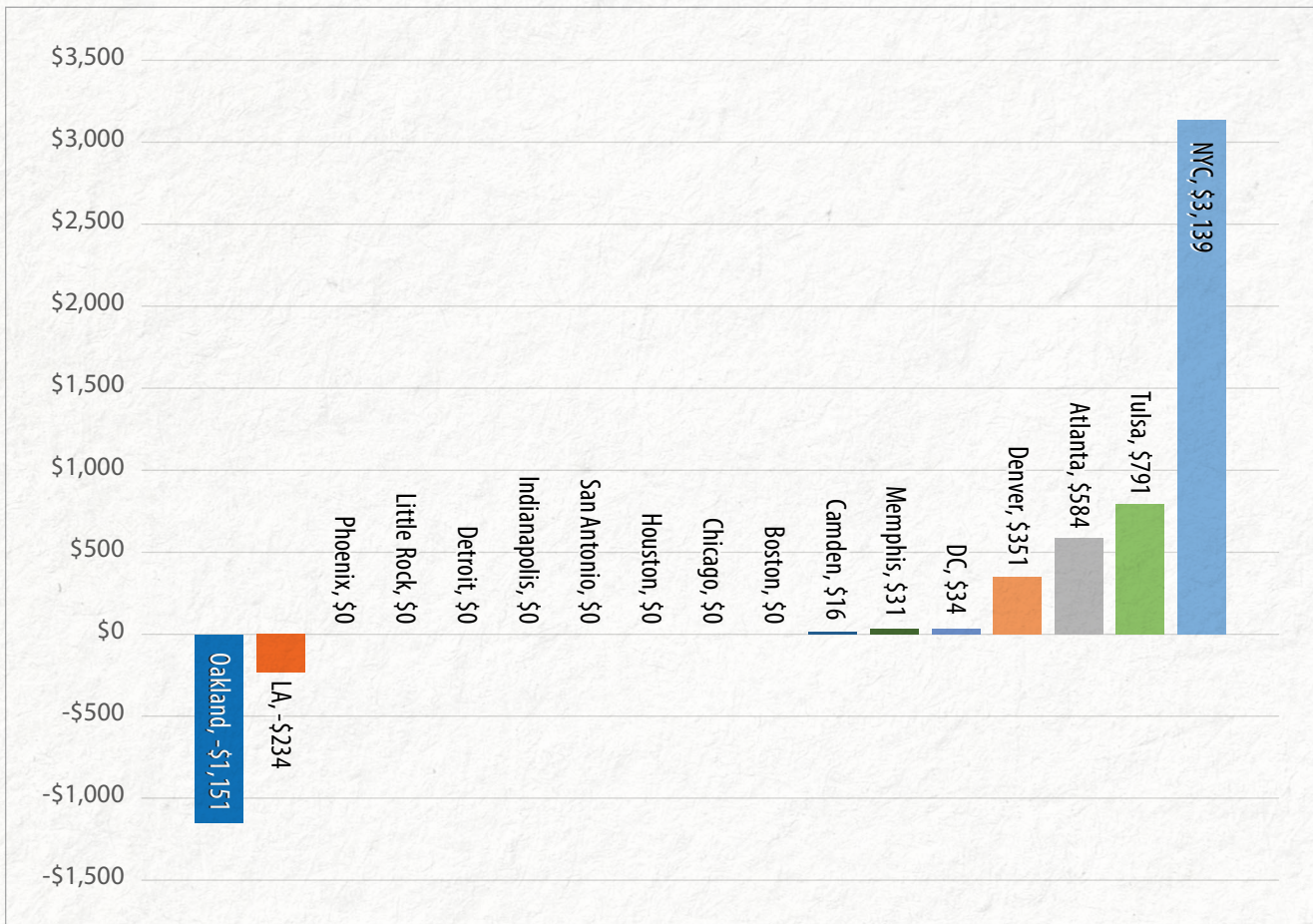
Next, we turn to nonpublic funding. In 10 of the 17 cities, charter schools receive more nonpublic funding than TPS (see Figure 8). The disparity is largest in Boston, where charter schools receive about \$2,400 more per pupil in nonpublic funds than TPS. The largest disparity favoring TPS is in Chicago, where charter schools receive about \$860 less nonpublic revenue per pupil than TPS.

**Figure 8: Nonpublic Funding Disparities Between TPS and Charter Schools in 17 US Cities – 2019-20**



Finally, the unknown funding category represents all funds for which we could not establish an origin through each city and state’s bookkeeping procedures. Thankfully, the amounts in this category are small to nothing for most cities (see Figure 9). Interestingly, in New York City, charter schools receive \$3,139 per pupil in unknown funds, while we do not classify any TPS funds as unknown. However, the story is flipped in Oakland, where we only classify \$63 per pupil as unknown for charters, but \$1,214 per pupil for TPS. We also classify small amounts (under \$1,000 per pupil) as unknown in Tulsa, Atlanta, Denver, Washington, DC, Memphis, Camden, and Los Angeles.

**Figure 9: Funding Disparities from Unknown Sources Between TPS and Charter Schools in 17 US Cities – 2019-20**



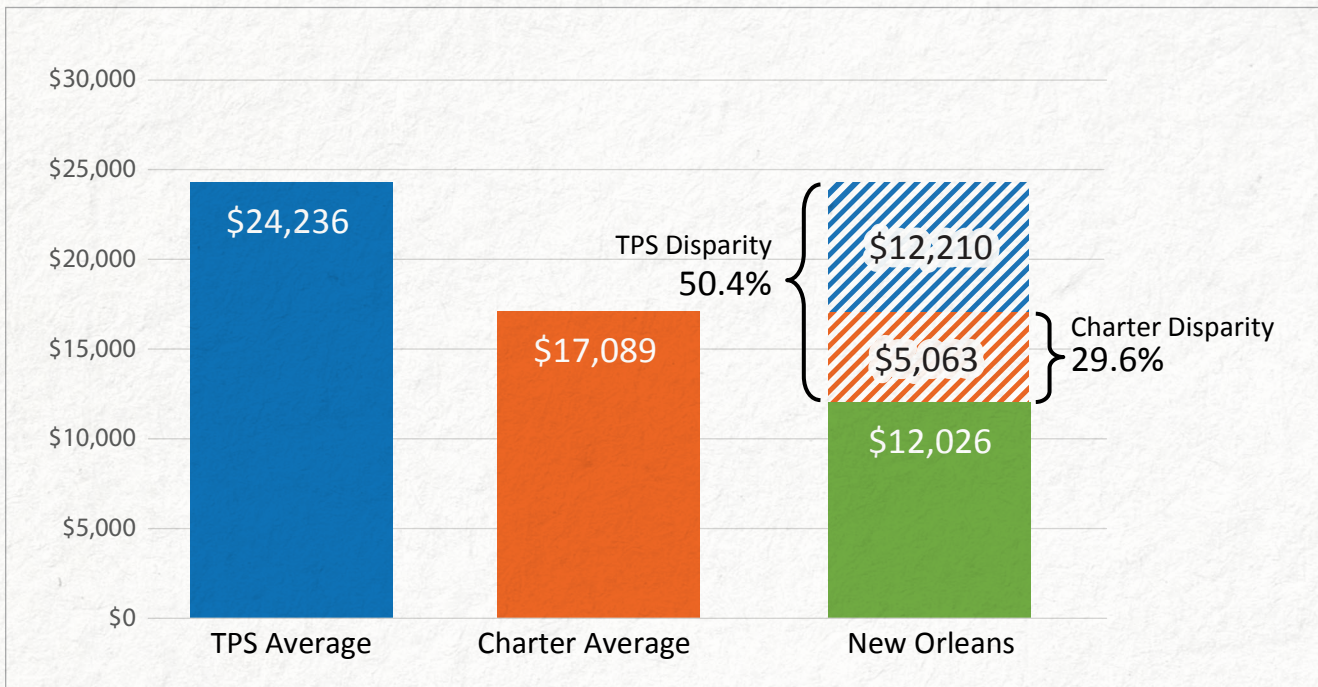
## New Orleans

Charter schools in New Orleans receive, on average, about 30 percent less revenue per pupil relative to charter schools in the other 17 cities and

50 percent less revenue per pupil relative to TPS in the other 17 cities (see Figure 10). With \$12,026 per pupil, New Orleans charter schools receive, on average, less revenue than the charter schools in 12 of the other 17 cities and less than the TPS in 16 out of the 17 other cities in our sample. Only in Detroit, Indianapolis, Phoenix, Little Rock, and Tulsa do charter schools, on average, receive less per-pupil funding than in New Orleans, and only in Phoenix do TPS receive less per-pupil funding than New Orleans charter schools (see Table 2).

New Orleans charter schools receive, on average, less revenue than the charter schools in 12 of the other 17 cities and less than the TPS in 16 out of the 17 other cities in our sample.

**Figure 10: Average Per-Pupil Funding in New Orleans Versus 17-City TPS and Charter School Averages – 2019-20**



## Conclusion

Public charter schools are increasing in popularity across the U.S., as more parents seek alternatives to residentially assigned schools for their children. Charter growth is especially pronounced in urban areas. Are charter schools funded equitably? Members of our research team have studied that question for two decades, consistently finding that students attending charter schools receive less per-pupil funding than their peers in traditional public schools (TPS). In this latest report, drawing upon data from the 2019-20 school year, we find that charter school students across 18 cities receive an average of 30 percent less funding per pupil than

**That charter school funding gap amounts to \$7,147 less per-pupil.**

students in TPS in 17 of those cities. That charter school funding gap amounts to \$7,147 less per-pupil, on average. While still alarmingly large, the charter funding gap in 2019-20 is three percentage points lower than the 33 percent funding gap we documented in 2017-18 for this same sample of cities. Incremental progress is being made to more equitably fund public charter schools.

**Incremental progress is being made to more equitably fund public charter schools.**



The charter school funding gap varies dramatically across cities. Houston, Memphis, Boston, and Denver have modest-sized gaps. Atlanta, Camden, and Indianapolis have massive gaps of almost 43 percent to nearly 53 percent. Overall, about 65 percent of the underfunding of public charter schools in our cities can be attributed to lower enrollments of students with disabilities in the charter sector, although that average estimate varies greatly across the cities and therefore is imprecise. For example, the charter sectors in Chicago and Washington, DC enroll similar proportions of students with disabilities as their

TPS counterparts, yet receive per-pupil funding that is \$8,633 and \$4,245 less, respectively. Charter schools receive less local funding, state funding, federal funding, and nonpublic funding than

TPS, though the differential is especially large in local funding. New Orleans is a special case in our study, as it has evolved to become essentially an all-charter public school district. New Orleans charters receive about 30 percent less in per-pupil funding than the average charter school sector in our study and 50 percent less than the average TPS.

How can policymakers fund charter schools more equitably? We recommend that policymakers channel as

many funding streams as possible into a single funding formula, used for both charters and TPS, that weights students equally based on need. As we documented in a recent case study of Los Angeles,<sup>25</sup> the state of California attempted to do just that with the establishment of its Local Control Funding Formula (LCFF) in 2013-14.

While the LCFF did shrink the charter school funding gap somewhat from its high of 40 percent, a flaw in the formula caps a key funding stream

About 65 percent of the underfunding of public charter schools in our cities can be attributed to lower enrollments of students with disabilities in the charter sector.

Charter schools receive less local funding, state funding, federal funding, and nonpublic funding than TPS.

We recommend that policymakers channel as many funding streams as possible into a single funding formula, used for both charters and TPS, that weights students equally based on need.

for charters but not for TPS, resulting in the 26 percent charter school funding disparity we see for Los Angeles in 2019-20. Denver also has made strides recently in reducing its charter school funding gap, though those gains are imperiled by political developments at the state and local level. More states and localities should seek full and lasting funding equity for all public school students, regardless of public school sector.

More states and localities should seek full and lasting funding equity for all public school students, regardless of public school sector.

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Mr. May is founder of, and senior consultant for, EduAnalytics, LLC, a consulting practice focused on hands-on data-based initiatives to improve student performance. Mr. May's client work includes developing technology infrastructure for various aspects of student performance management – student information systems, instructional data management systems, assessment results delivery and analysis frameworks. Mr. May, a CPA, has expertise in K-12 education finances and provides research, consulting, and analysis for various aspects of funding equity and allocation. He is a co-inventor of In\$ite® - the Finance Analysis Model for Education® - a patented software tool for school-level and district-level expenditure analysis.



## Larry D. Maloney

Mr. Maloney is president of Aspire Consulting and has investigated expenditure patterns of the nation's public schools on behalf of states and individual school districts since 1992. Mr. Maloney participated in the research team for the Fordham Institute revenue study in 2005, the Ball State University revenue study in 2010, and the University of Arkansas study in 2014. Recent projects include evaluations of revenues and expenditure patterns of eleven major metropolitan school districts and the charter schools located within their boundaries. Mr. Maloney co-authored a series of reports for the Fordham Institute on future retirement costs for three school districts, as well as conducting a school-by-school expenditure analysis for the Washington, D.C. region. He served as the evaluator for a U.S. Department of Education program designed to enhance the level of products and services provided by state charter associations. Additionally, he provided the financial analysis for the U.S. Government Accountability Office study of Title 1 expenditures and the U.S. Department of Education National Charter School Finance Study.

## Appendix A:

# Detailed Description of Data and Methodology

For each city, we account for every source of revenue flowing to every TPS or charter school within the region's boundaries (except for New Orleans, which we treat as an all-charter district). We source enrollment and finance data from official district, state, and/or federal sources, with state sources as the preferred sources and district and federal sources only used when required data are not available from state sources. We explain the geographic boundaries we defined for each city and list the sources for each below:

- **Atlanta, Georgia**—We include all TPS in Atlanta Public Schools (APS) and all charter schools which geographically fall within APS boundaries. We obtained enrollment data<sup>26</sup> from the Georgia Governor's Office of Student Achievement and requested financial data for TPS as well as charter school financial audits from the Georgia Department of Education (DOE) by email.
- **Boston, Massachusetts**—We include all TPS in Boston Public Schools (BPS) and all charter schools which geographically fall within BPS boundaries. We obtained enrollment data from reports, directories, and maps on the Massachusetts DOE and Boston Public Schools websites<sup>27</sup> and financial data from the Massachusetts DOE End of Year Financial Reports.<sup>28</sup>
- **Camden, New Jersey**—We include all TPS in Camden City School District (CCSD) and all charter schools which geographically fall within CCSD boundaries. There are three schools, considered to be Mastery Schools, which are technically considered TPS by the state but function as charter schools, independent from the school district: KIPP Cooper Norcross, Camden Prep Inc., and Mastery Schools of Camden Inc. We classify these schools as charter schools in our analysis. We obtained enrollment data<sup>29</sup> from the New Jersey DOE website and requested financial data from the New Jersey DOE Audit Summary (AudSum) data system.
- **Chicago, Illinois**—We include all TPS in Chicago Public Schools (CPS) and all charter schools which geographically fall within CPS boundaries. We obtained both enrollment<sup>30</sup> and revenue data from the Illinois State Board of Education and supplemented with demographic enrollment data from CPS.<sup>31</sup> For TPS, we use the state's Comprehensive Financial Annual Report<sup>32</sup> and for charter schools, we use independent financial audits available through the state.<sup>33</sup>
- **Denver, Colorado**—We include all TPS in Denver Public Schools (DPS) and all charter schools which geographically fall within DPS boundaries. We obtained both enrollment<sup>34</sup> and financial data<sup>35</sup> from the Colorado DOE.

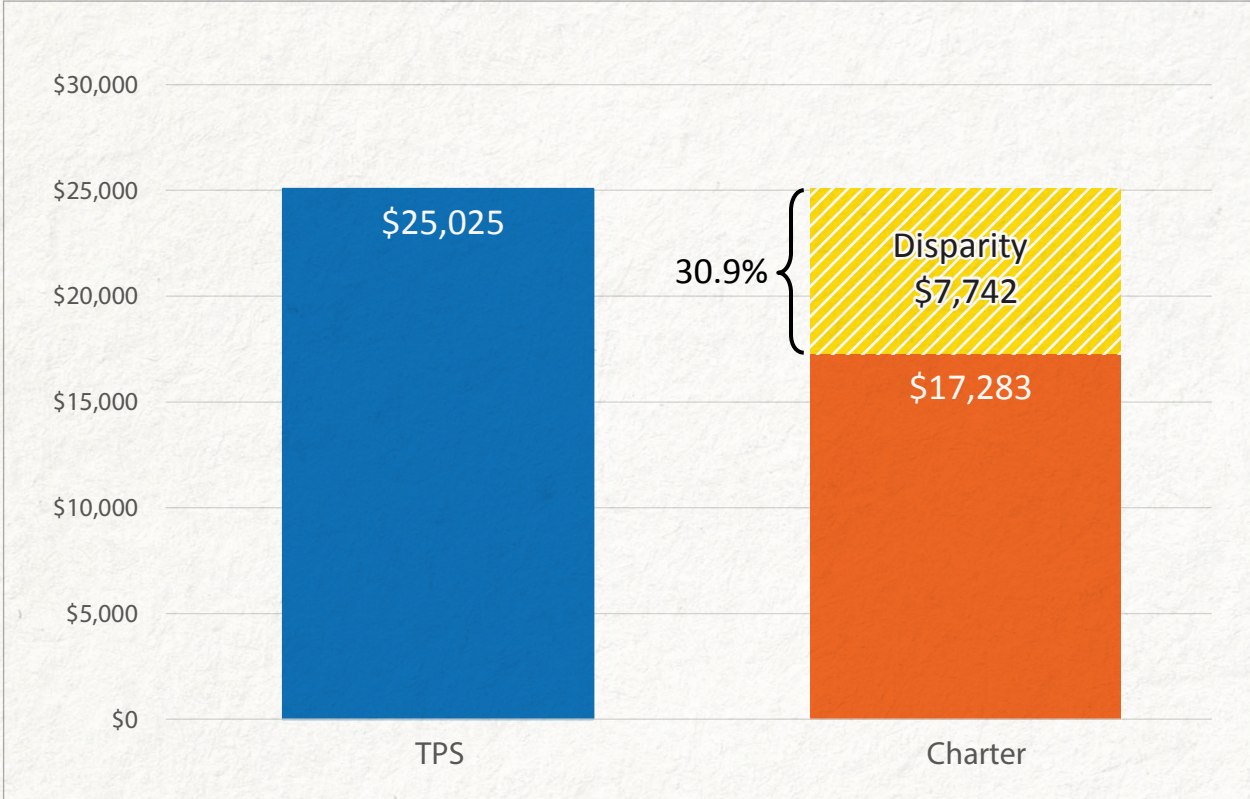
- **Detroit, Michigan**—We include all TPS in Detroit Public Schools (DPS) and all charter schools which geographically fall within DPS boundaries. We obtained both enrollment and financial data from the Michigan School Data system, a project of the Michigan DOE.<sup>36</sup>
- **Houston, Texas**—We include all TPS in the Houston Independent School District (HISD) and all charter schools which geographically fall within HISD boundaries. We manually verified that each independent, non-district charter school (some of which did not have a Houston address) falls within the attendance zone for HISD by identifying area schools in the Texas School Directory from the Texas Education Agency (TEA)<sup>37</sup> and comparing school addresses to the HISD attendance boundary map.<sup>38</sup> We then gathered enrollment and revenue data from the TEA.<sup>39</sup>
- **Indianapolis, Indiana**—We include all TPS in Indianapolis Public Schools (IPS) and all charter schools which geographically fall within IPS boundaries. We collect enrollment data from the Indiana DOE,<sup>40</sup> except for Title I enrollment data, which we collect from NCES.<sup>41</sup> We obtained revenue data through a Freedom of Information Act request addressed to the Indiana DOE Public Records Office.<sup>42</sup>
- **Little Rock, Arkansas**—We include all TPS in Little Rock School District (LRSD) and all charter schools which geographically fall within LRSD boundaries. We obtained enrollment data from My School Info<sup>43</sup> and financial data from the Arkansas Public School Computer Network<sup>44</sup> (both databases are part of the Arkansas Department of Education Statewide Information System).
- **Los Angeles, California**—We include all TPS in the Los Angeles Unified School District (LAUSD) and all charter schools which geographically fall within LAUSD boundaries. We obtained both enrollment<sup>45</sup> and financial data<sup>46</sup> from the California Department of Education (CDE) website.
- **Memphis, Tennessee**—We include all TPS in Memphis-Shelby County Schools (MSCS) and all charter schools which geographically fall within MSCS boundaries. We obtained enrollment data from the Tennessee DOE,<sup>47</sup> financial data for TPS from MSCS,<sup>48</sup> and financial data for charter schools from the Tennessee Comptroller of the Treasury.<sup>49</sup>
- **New Orleans, Louisiana**—We include all charter schools that fall within New Orleans Public Schools (NOPS; formerly Orleans Parish School Board) boundaries. We also consider the three TPS entities remaining as of 2019-20 to be charter schools, since they served less than one percent of the public school population and since one was in transition to a charter school, one was located in a correctional center, and one was the NOPS central office (representing 185 students not assigned to a specific school location). We obtained both enrollment<sup>50</sup> and financial data<sup>51</sup> from the Louisiana DOE.

- **New York City, New York**—We include all TPS in New York City Public Schools (NYCPS) and any charter schools reporting complete data that geographically fall within NYCPS boundaries. We excluded 13 charter schools for which we could not locate financial data.<sup>52</sup> We obtained both enrollment<sup>53</sup> and financial data<sup>54</sup> from the New York State DOE.
- **Oakland, California**—We included all TPS in Oakland Unified School District (OUSD) and all charter schools which geographically fall within OUSD boundaries. We obtained both enrollment<sup>55</sup> and financial data<sup>56</sup> from CDE.
- **Phoenix, Arizona**—The Phoenix area includes TPS in 29 school districts and any charter schools that geographically fall within those districts' boundaries. We obtained enrollment data for these schools from the Arizona DOE<sup>57</sup> and financial data from Annual Financial Reports in the state website's School Finance section.<sup>58</sup>
- **San Antonio, Texas**—We include all TPS in the San Antonio Independent School District (SAISD) and all charter schools which geographically fall within SAISD boundaries. We manually verified that each independent, non-district charter school (some of which did not have a San Antonio address) falls within the attendance zone for SAISD by identifying area schools in the Texas School Directory from the Texas Education Agency (TEA)<sup>59</sup> and comparing school addresses to the SAISD attendance boundary map.<sup>60</sup> We then gathered enrollment and revenue data from the TEA.<sup>61</sup>
- **Tulsa, Oklahoma**—We included all TPS in Tulsa Public Schools and all charter schools within the district's boundaries. We obtained enrollment data from the Oklahoma DOE website<sup>62</sup> and requested financial data from the Oklahoma DOE directly, since it is not public facing on the department's website.
- **Washington, DC**—We include all TPS in District of Columbia Public Schools (DCPS) and all charter schools that geographically fall within DCPS boundaries.<sup>63</sup> We obtained enrollment data from the DC Office of the State Superintendent of Education,<sup>64</sup> financial data for TPS by request from the DC Office of the Chief Financial Officer, and financial data for charter schools on the websites of DCPS,<sup>65</sup> the US Treasury,<sup>66</sup> DC Retirement Board,<sup>67</sup> and DC Chief Financial Officer.<sup>68</sup>

## Indebtedness

Because debts must be repaid, we do not include bond revenue in our main analysis. However, access to debt is an important aspect of school funding. School districts often issue bonds and use the proceeds to build new or maintain old buildings. TPS often have greater access to debt through the state bond process than do charter schools. This additional disparity can make it difficult for charter schools to make significant investments in capital projects. Figure A.1 shows the average funding disparity for all 18 cities when bond proceeds and any other types of debt are included, increasing the disparity from about 30 percent (\$7,147 per pupil) to a little over 31 percent (\$7,742 per pupil).

Figure A.1: Overall Disparity with Debt Included – 2019-20

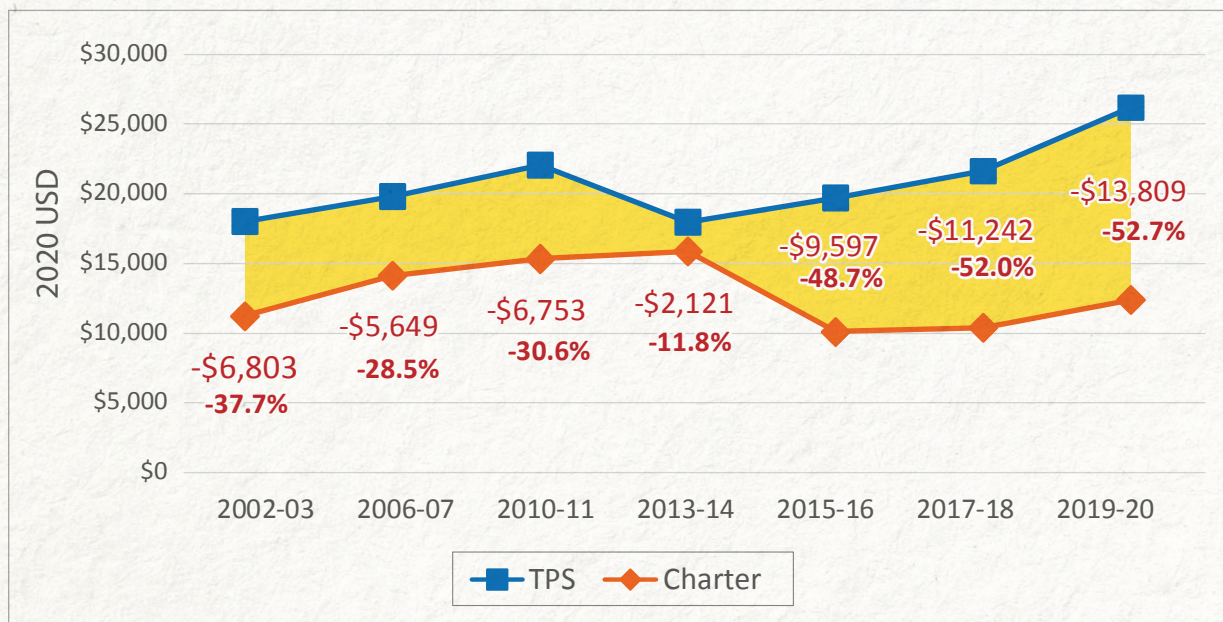


# Appendix B: City-Level Analyses

## Atlanta, Georgia

Our team has studied TPS and charter school funding in Atlanta, Georgia since 2002-03, when we found that the funding disparity was about 38 percent (\$6,803 per pupil in 2020 dollars), favoring TPS (see Figure B.1). Since then, the funding disparity has fluctuated from about 12 (2013-14) to 54 percent (2019-20). With TPS funding at \$26,203 and charter funding at \$12,394 per pupil in 2019-20, Atlanta had the largest disparity among the 18 cities in our analysis in terms of percent difference. Atlanta has earned an F rating in our last two reports.

**Figure B.1: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Atlanta – 2002-03 to 2019-20**



About 70 percent of all TPS funding in Atlanta (\$18,328 per pupil) comes from local sources (2019-20 data; see Table B.1 and Figure B.2). Another \$5,386 comes from state sources, \$1,774 from federal sources, \$498 from nonpublic sources, and \$384 from unknown sources. For unknown public funds, TPS receive negative \$167 per pupil because Atlanta Public Schools receive pass-through funds which ultimately go to charter schools and share facilities with charter schools, which we account for as in-kind services. We attribute the pass-through funds as a debit to TPS in the unknown public category and a credit to charter schools in the unknown public category, and the in-kind services as a debit to TPS and credit to charter schools, both in the unknown public category. While TPS receive a large amount of local funds, charter schools receive no local funds. Instead, Atlanta charter schools receive a

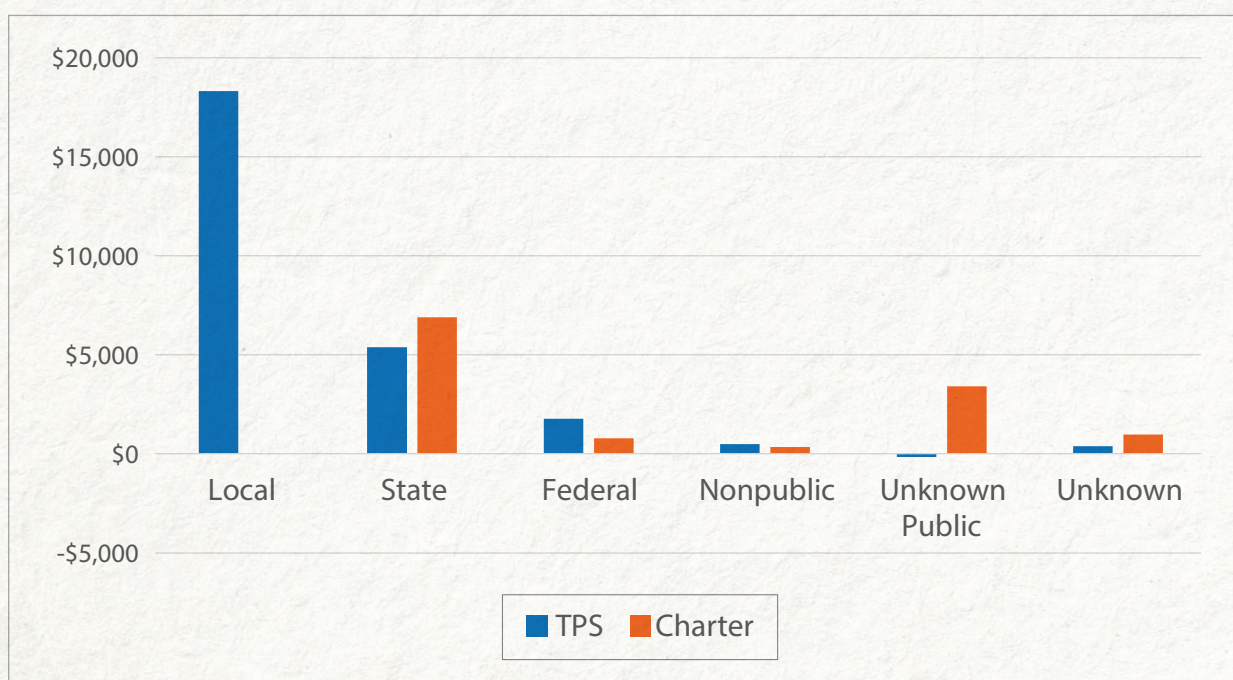


little more state funds than TPS (\$6,903, or \$1,517 more than TPS per pupil). Charter schools in Atlanta receive \$778 per pupil in federal funds, \$338 in nonpublic funds, and \$968 in unknown funds.

**Table B.1: Average Disparity Per Pupil by Revenue Source in Atlanta – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity Per Student (%)
Local	\$18,328	\$0	<b>-\$18,328</b>	
State	\$5,386	\$6,903	<b>\$1,517</b>	28.2%
Federal	\$1,774	\$778	<b>-\$996</b>	<b>-56.1%</b>
Nonpublic	\$498	\$338	<b>-\$161</b>	<b>-32.2%</b>
Unknown Public	<b>-\$167</b>	\$3,407	\$3,575	<b>-2,138.7%</b>
Unknown	\$384	\$968	\$584	151.8%

**Figure B.2: TPS and Charter Funding Per Pupil by Revenue Source in Atlanta – 2019-20**

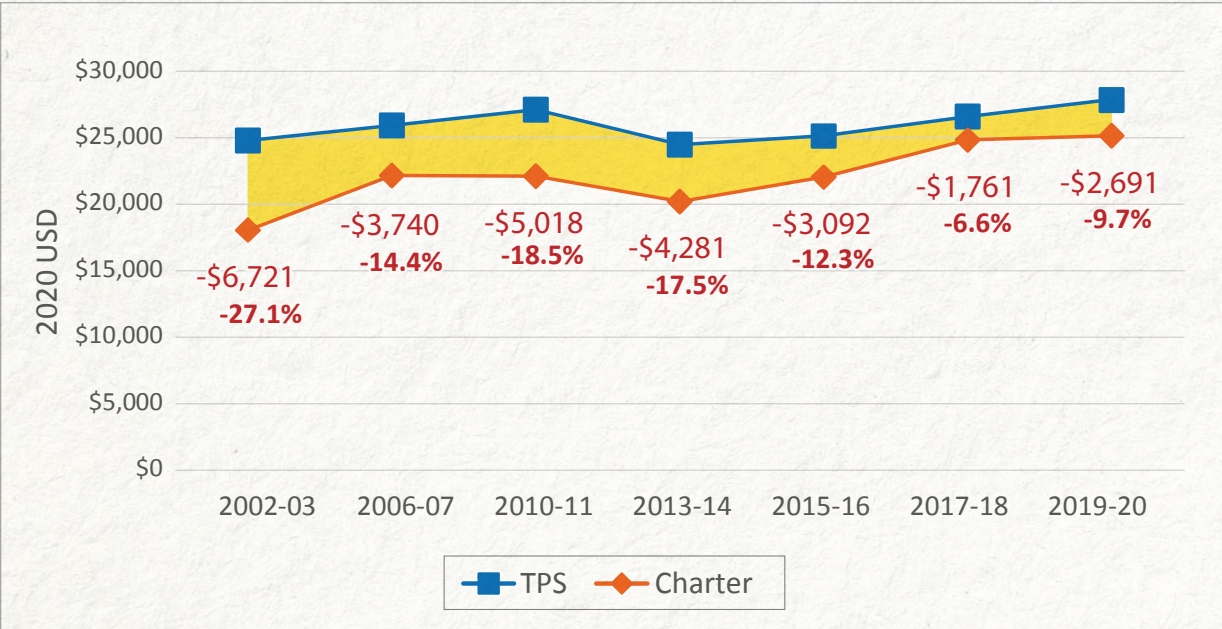


In Atlanta, a large portion of the charter school student population attends Georgia Cyber Charter school. Since virtual schools do not have the same kind of overhead costs as brick-and-mortar schools, this large virtual population could be, in part, driving the funding disparity. Indeed, we find that when we examine the difference between TPS and brick-and-mortar charter schools, the gap decreases, but only by 32 percent. With a 36 percent gap between TPS and brick-and-mortar charter schools, Atlanta still earns an F with one of the worst disparities among the 18 cities in our analysis.

# Boston, Massachusetts

Our team has studied TPS and charter school funding in Boston, Massachusetts since 2002-03, when the funding disparity was about 27 percent (\$6,721 per pupil in 2020 dollars; see Figure B.3). The disparity has generally been declining since then, but widened by about three percentage points from 2017-18 to 2019-20, with TPS funding at \$27,852 per pupil and charter school funding at \$25,161 per pupil in 2019-20. In our 2017-18 analysis, we ranked Boston in second place with a B rating, but due to its slight regression in charter funding equity, we now rank Boston in third place, as the approximately 10 percent gap (\$2,691 per pupil) places it in the B range just behind Houston and Denver.

**Figure B.3: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Boston – 2002-03 to 2019-20**

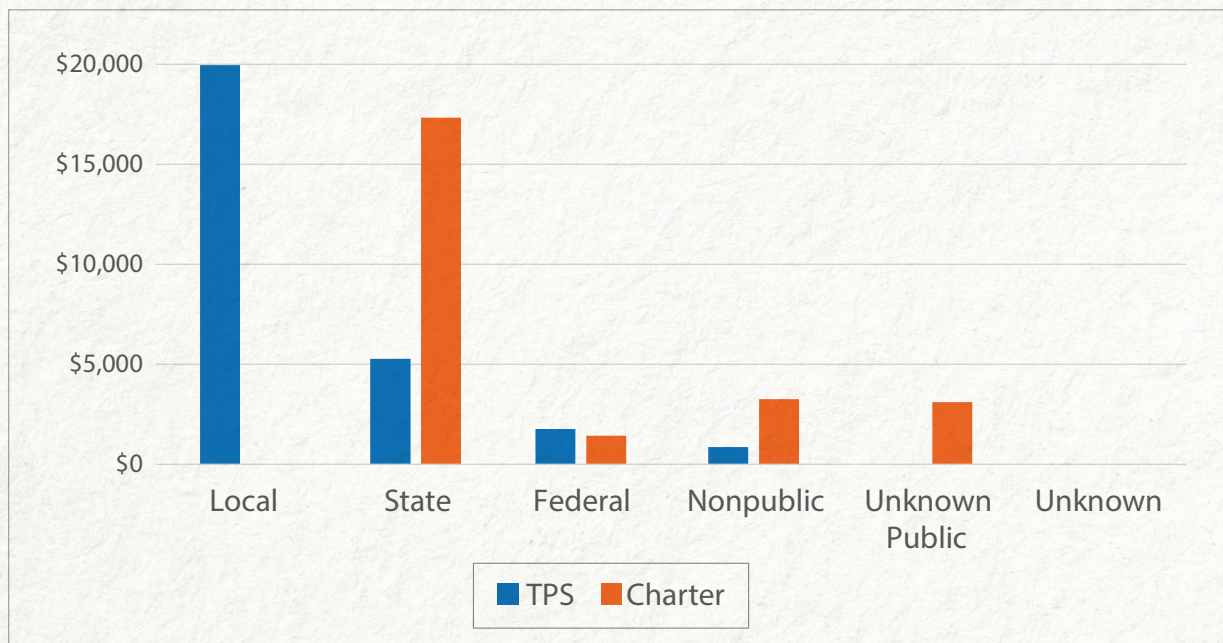


In Boston, the majority of TPS funds (about 72 percent, or \$19,951) come from local sources, whereas the majority of charter school funds (about 69 percent, or \$17,339) come from state sources (2019-20 data; see Table B.2 and Figure B.4). Charter schools receive approximately the same amount of federal funds as TPS and receive more nonpublic and unknown public funds than TPS do.

**Table B.2: Average Disparity Per Pupil by Revenue Source in Boston – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$19,951	\$0	<b>-\$19,951</b>	
State	\$5,269	\$17,339	\$12,070	229.1%
Federal	\$1,768	\$1,446	<b>-\$322</b>	<b>-18.2%</b>
Nonpublic	\$864	\$3,256	\$2,392	277.0%
Unknown Public	\$0	\$3,120	\$3,120	
Unknown	\$0	\$0	\$0	

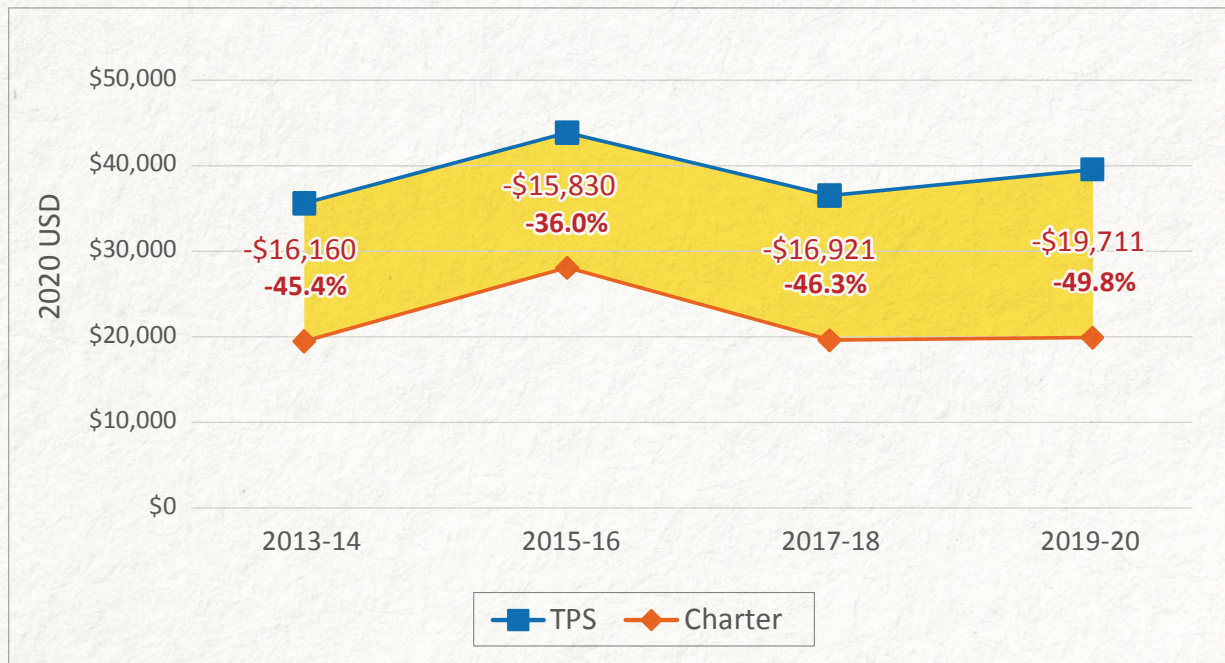
**Figure B.4: TPS and Charter Funding Per Pupil by Revenue Source in Boston – 2019-20**



## Camden, New Jersey

Our first analysis including Camden examined TPS and charter school funding during the 2013-14 school year. From that year to 2019-20, the TPS-charter disparity has been consistently large as TPS and charter school funding have fluctuated almost in tandem (see Figure B.5). The gap has ranged from 36 percent (in 2015-16) to about 50 percent (in 2019-20), or in 2020 dollars, from \$15,830 to \$19,711. Rated an F, Camden has the largest per-pupil disparity in terms of dollars among our 18 cities in 2019-20 and is rated second worst in terms of percent difference.

**Figure B.5: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Camden – 2013-14 to 2019-20**

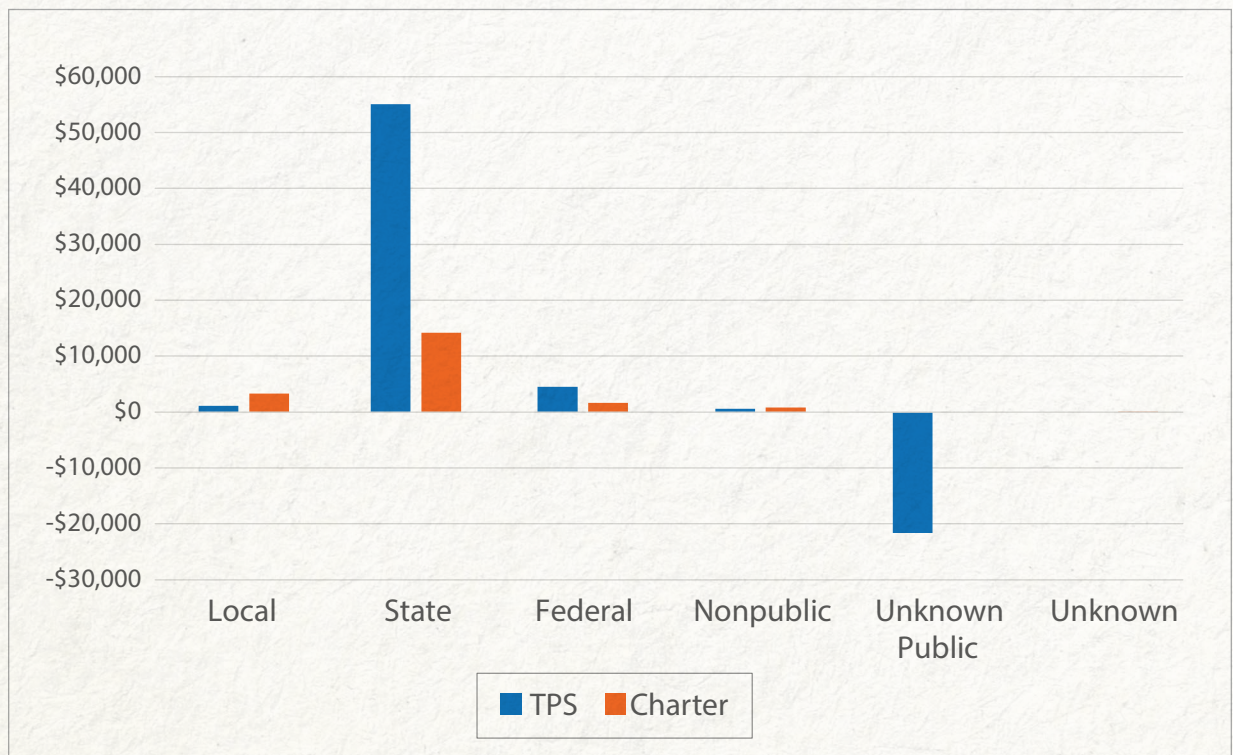


In Camden, charter schools receive more local funding than TPS (\$3,295 versus \$1,097 or about 200 percent more; see Figure B.6). However, this gap is miniscule compared to the gap in state funding: TPS receive \$55,075 per pupil while charter schools only receive \$14,164 per pupil, a disparity of over 74 percent. In addition, TPS receive more federal funds (\$4,483 compared to \$1,639 per pupil). Charter schools receive more nonpublic funds (\$786 compared to \$586 per pupil) and unknown funds (\$16 compared to \$0 per pupil). However, we attribute \$21,631 per pupil to TPS as a debit because they receive pass-through funds that ultimately find their home in charter and other nontraditional public schools. These funds are accounted for as credits to charters in the state funding category.

**Table B.3: Average Disparity Per Pupil by Revenue Source in Camden – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$1,097	\$3,295	\$2,198	200.3%
State	\$55,075	\$14,164	-\$40,911	-74.3%
Federal	\$4,483	\$1,639	-\$2,844	-63.4%
Nonpublic	\$586	\$786	\$199	34.0%
Unknown Public	-\$21,631	\$0	\$21,631	
Unknown	\$0	\$16	\$16	

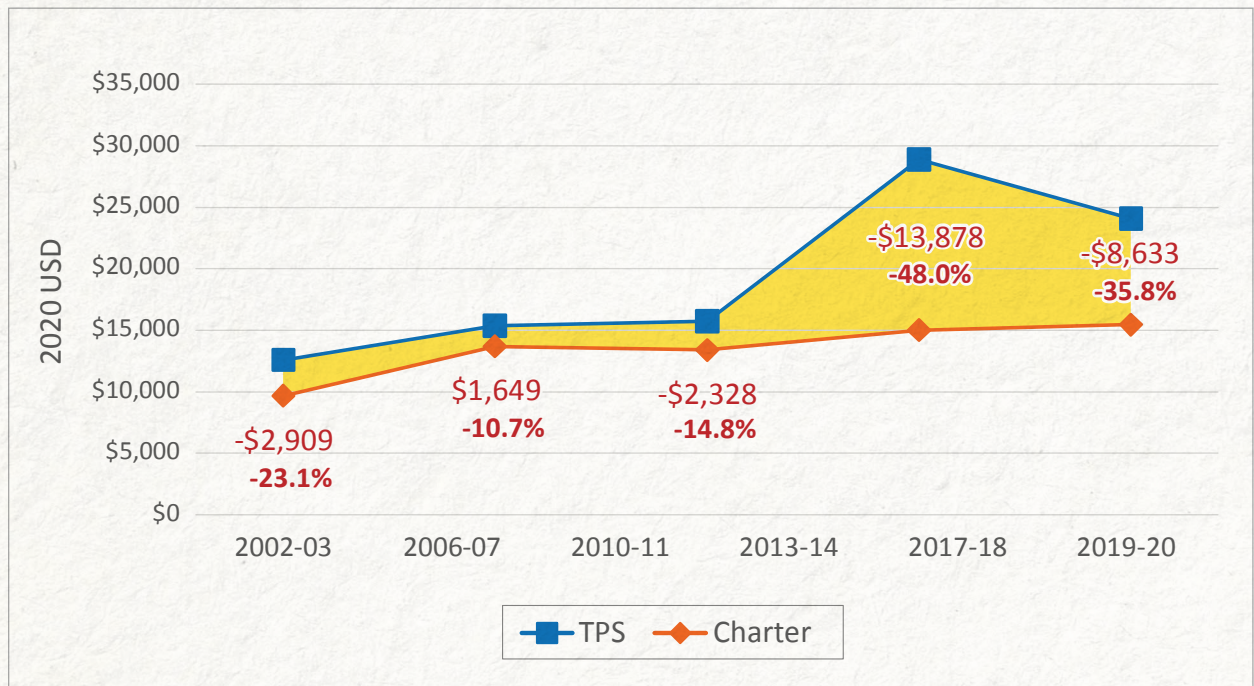
**Figure B.6: TPS and Charter Funding Per Pupil by Revenue Source in Camden – 2019-20**



## Chicago, Illinois

Our team studied TPS and charter school funding in Chicago, Illinois in 2002-03, 2006-07, 2010-11, 2017-18, and 2019-20. While the disparity decreased from 2002-03 to 2006-07, we found it to be very large in 2017-18—48 percent or \$13,878 in 2020 dollars. However, the disparity decreased by about 12 percentage points from 2017-18 to 2019-20, bringing the disparity down to \$8,633. Even still, with such a large disparity, Chicago earns an F for 2019-20.

**Figure B.7: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Chicago – 2002-03 to 2019-20**

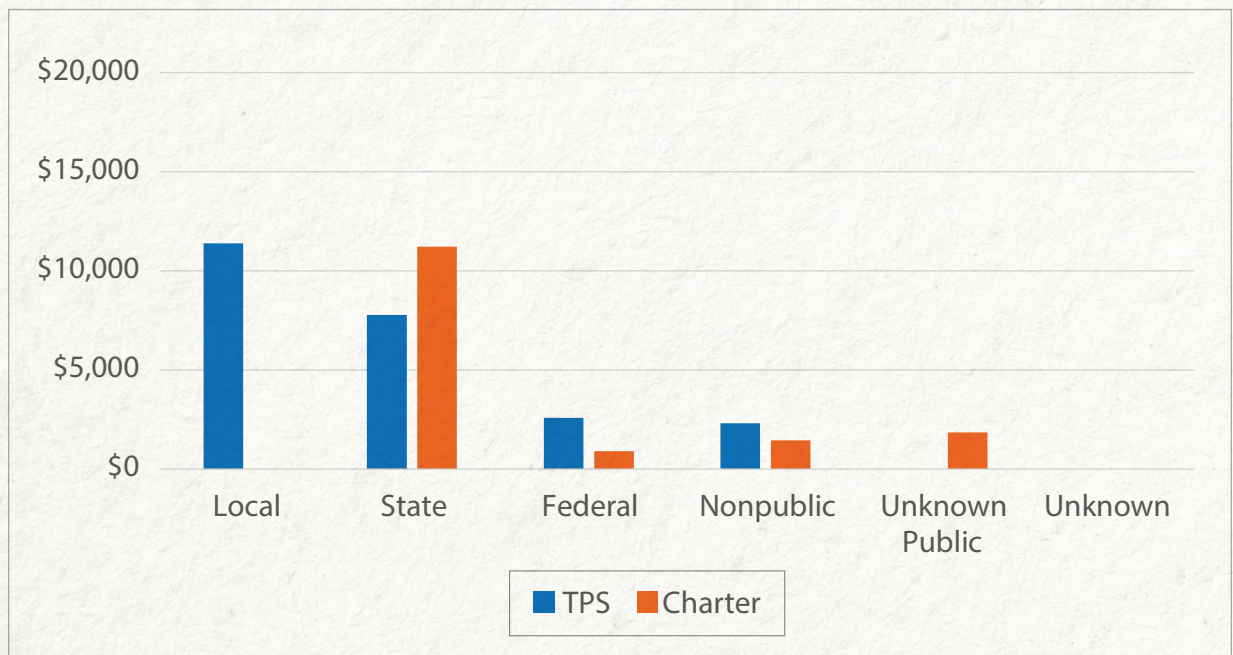


In Chicago, charter schools do not receive local funding, which is the largest source of revenue for TPS (\$11,382 per pupil, or a little over 47 percent of all TPS funding in 2019-20; see Table B.4 and Figure B.8). However, charter schools receive more state funding than TPS (\$11,217 per pupil, or about 73 percent of all charter school funding, compared to \$7,781 per pupil, or about 32 percent of all TPS funding). While charter schools receive \$1,860 per pupil in unknown public funding and TPS receive none, TPS receive more nonpublic funds than charter schools (\$2,327 per pupil compared to \$1,468 per pupil).

**Table B.4: Average Disparity Per Pupil by Revenue Source in Chicago – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$11,382	\$0	<b>-\$11,382</b>	
State	\$7,781	\$11,217	\$3,436	44.2%
Federal	\$2,596	\$908	<b>-\$1,688</b>	<b>-65.0%</b>
Nonpublic	\$2,327	\$1,468	<b>-\$859</b>	<b>-36.9%</b>
Unknown Public	\$0	\$1,860	\$1,860	
Unknown	\$0	\$0	\$0	

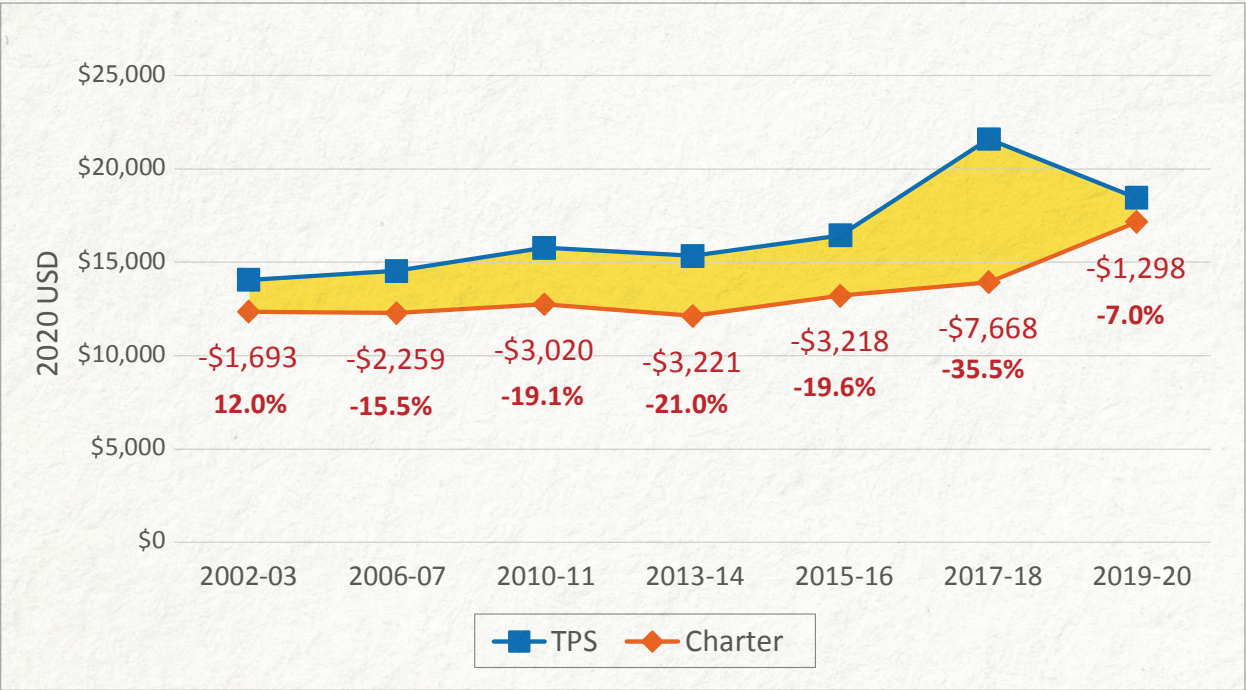
**Figure B.8: TPS and Charter Funding Per Pupil by Revenue Source in Chicago – 2019-20**



# Denver, Colorado

In Denver, the charter school funding disparity was slowly but consistently increasing from 2002-03 to 2017-18, but starkly decreased between 2017-18 and 2019-20, dropping from about 36 percent to seven percent (see Figure B.9). Part of the change was because of bond revenue received by Denver TPS in 2017-18 but not in 2019-20. Other factors that decreased the Denver charter school funding gap included increased direct payments from the state to charters and more in-kind services provided by the TPS to the charter sector, all accounted for in our calculations. With this improvement in charter school funding equity, Denver places second in our ranking with a B.

**Figure B.9: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Denver – 2002-03 to 2019-20**



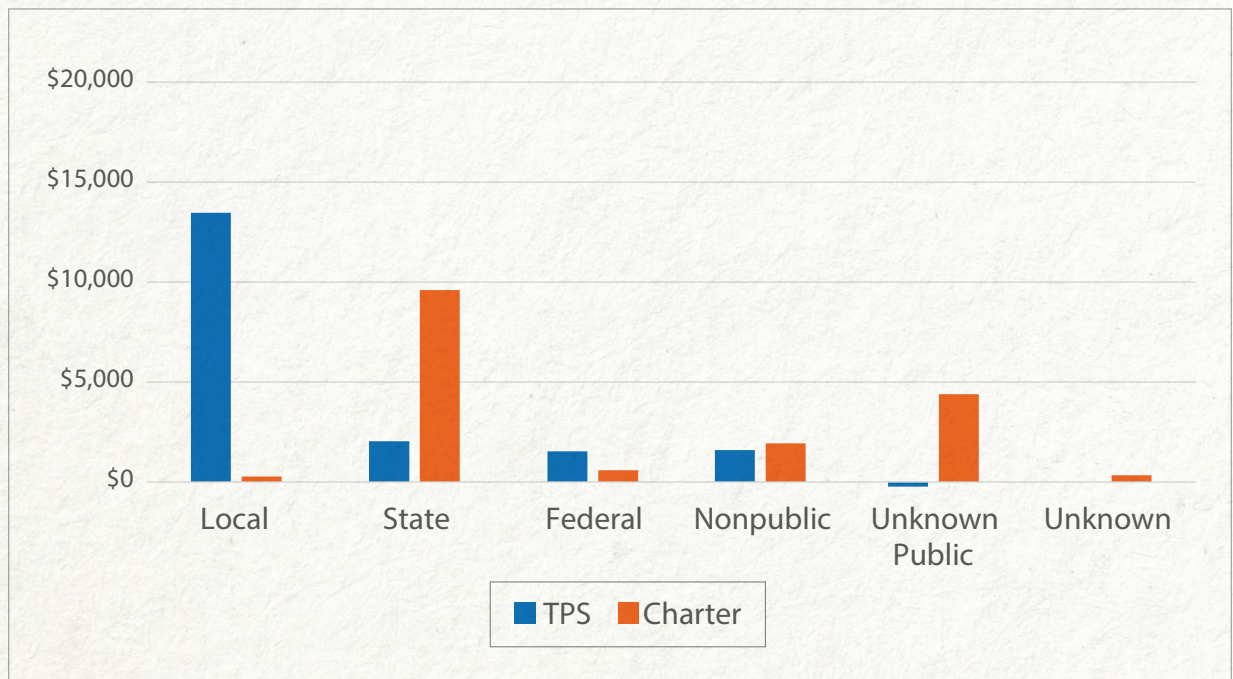


Charter schools in Denver receive more funds per pupil than TPS in the state (\$9,614 compared to \$2,052), nonpublic (\$1,937 compared to \$1,607), and unknown (\$351 compared to \$0) categories, as well as in the unknown public category, where we attribute \$223 in pass-through funds to TPS as a debit and charters receive \$4,389 per pupil (see Table B.5 and Figure B.10). However, TPS receive more local funds (\$13,477 compared to \$283 per pupil) and federal funds (\$1,546 compared to \$587 per pupil) relative to charter schools. Charter school funding, therefore, mostly comes from state (56 percent) and unknown public (about 26 percent) sources, whereas TPS funding mostly comes from local (73 percent) sources.

**Table B.5: Average Disparity Per Pupil by Revenue Source in Denver – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$13,477	\$283	-\$13,195	-97.9%
State	\$2,052	\$9,614	\$7,561	368.4%
Federal	\$1,546	\$587	-\$959	-62.0%
Nonpublic	\$1,607	\$1,937	\$330	20.6%
Unknown Public	-\$223	\$4,389	\$4,613	2,064.7%
Unknown	\$0	\$351	\$351	

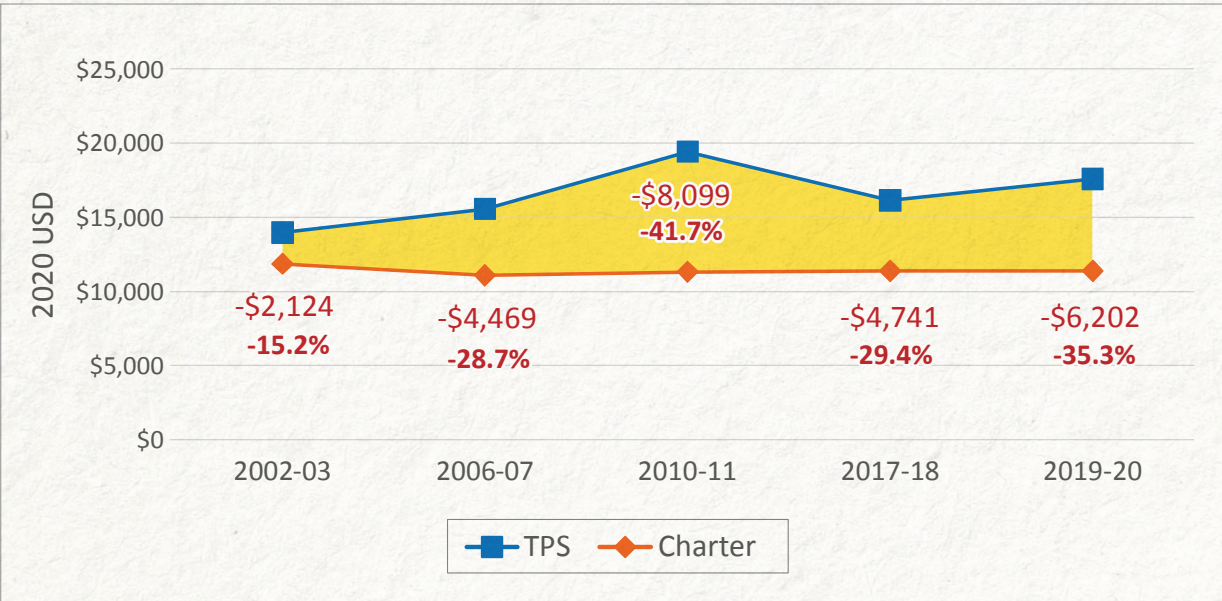
**Figure B.10: TPS and Charter Funding Per Pupil by Revenue Source in Denver – 2019-20**



# Detroit, Michigan

In Detroit, our team found there was a widening TPS-charter funding disparity from 2002-03 (when it was about 15 percent, favoring TPS) to 2010-11 (when it was about 42 percent). After a brief sabbatical, we began studying charter school funding in Detroit again in 2017-18 and found that the gap had decreased to 29 percent, favoring TPS (\$4,741 in 2020 dollars; see Figure B.11). This disparity widened to over 35 percent (\$6,202) in 2019-20. Detroit has earned an F rating for its funding inequity in 2017-18 and 2019-20.

**Figure B.11: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Detroit – 2002-03 to 2019-20**

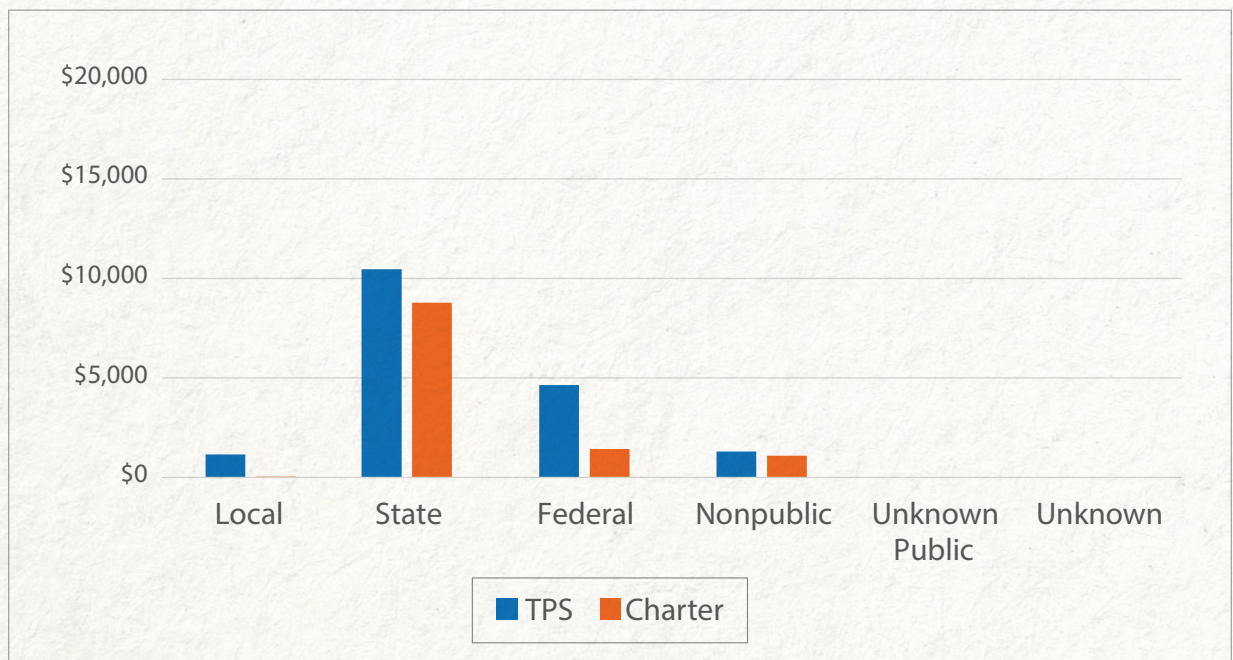


In Detroit, we were able to identify the source of every dollar received by TPS and charter schools in 2019-20 and found that TPS receive more funding than charter schools in every category (see Table B.6 and Figure B.12). Local funding plays a very small role (only \$1,161 per pupil for TPS and \$44 per pupil for charter schools in 2019-20). Most of the funding for both TPS and charter schools comes from the state—for TPS, \$10,461 per pupil or about 60 percent of all TPS funding and for charter schools, \$8,795 per pupil or over 77 percent of all charter school funding. The next largest source of funding for both TPS and charter schools is federal funds; TPS receive \$4,645 per pupil or over 26 percent of all TPS funding and charter schools receive \$1,431 per pupil or about 13 percent of all charter school funding.

**Table B.6: Average Disparity Per Pupil by Revenue Source in Detroit – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$1,161	\$44	-\$1,116	-96.2%
State	\$10,461	\$8,795	-\$1,666	-15.9%
Federal	\$4,645	\$1,431	-\$3,214	-69.2%
Nonpublic	\$1,303	\$1,096	-\$207	-15.9%
Unknown Public	\$0	\$0	\$0	0.0%
Unknown	\$0	\$0	\$0	0.0%

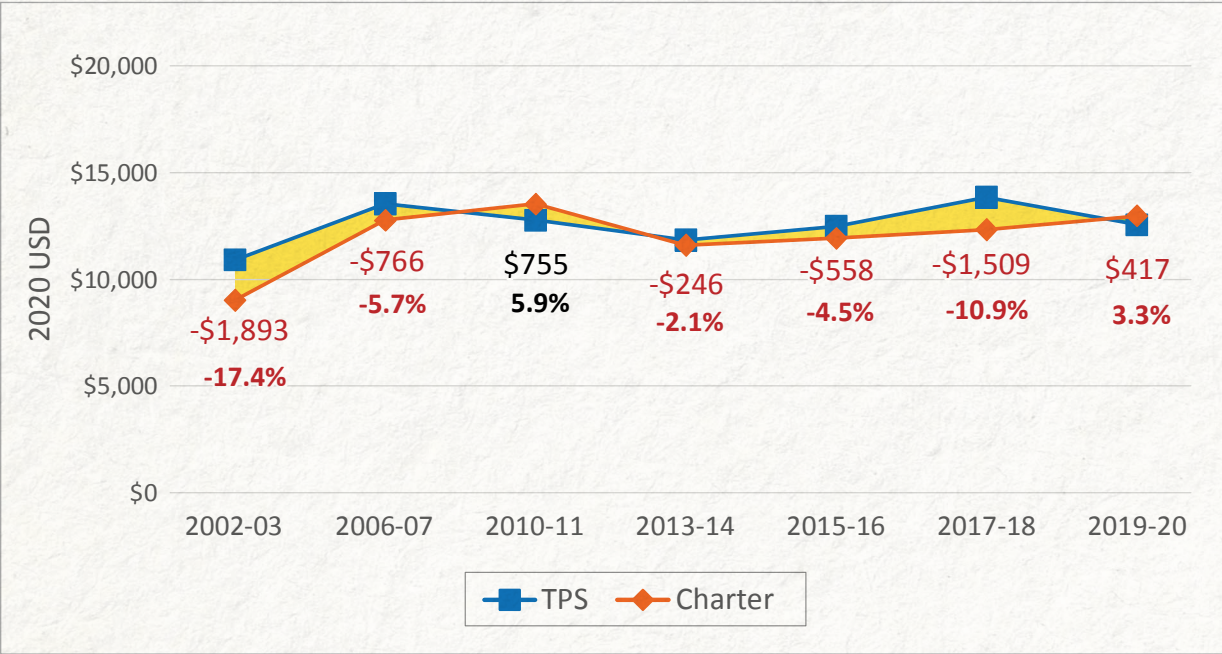
**Figure B.12: TPS and Charter Funding Per Pupil by Revenue Source in Detroit – 2019-20**



# Houston, Texas

Houston has been an example of near funding parity between TPS and charter schools since 2006-07 (see Figure B.13). Although the disparity increased by about six percentage points from 2015-16 to 2017-18, favoring TPS both years, it shrunk to about three percent in 2019-20, this time favoring charter schools (a \$417 gap). Among the cities in our analysis of the 2019-20 school year, Houston ranks in first place, earning the only A awarded in this analysis for its funding equity.

**Figure B.13: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Houston – 2002-03 to 2019-20**

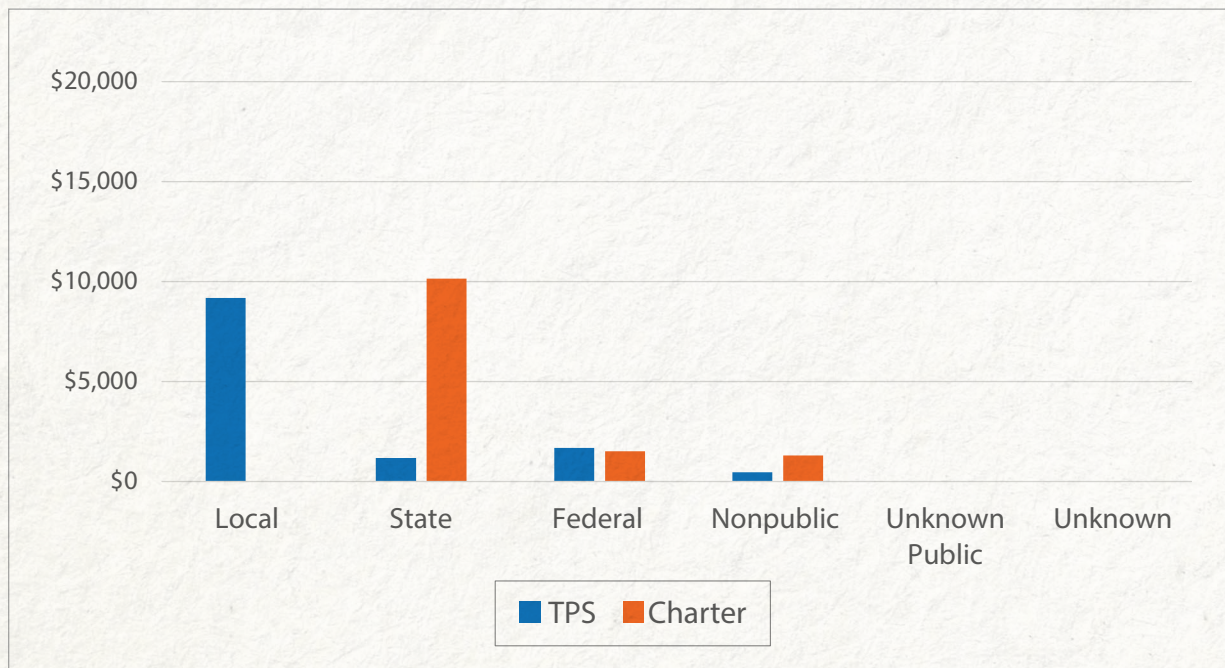


We were able to identify the source of every dollar allocated to public schools in Houston in 2019-20 (see Table B.7 and Figure B.14). Charter schools do not receive local funding (TPS receive \$9,191 per pupil in local funds, representing about 73 percent of all TPS funds), but make up for the difference with state funding (charter schools receive \$10,142 per pupil in state funds, representing about 78 percent of all charter school funds). Charter schools receive a little less federal funding per pupil than TPS (\$1,512 compared to \$1,690 per pupil), but more nonpublic funding (\$1,315 compared to \$482 per pupil).

**Table B.7: Average Disparity Per Pupil by Revenue Source in Houston – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$9,191	\$0	<b>-\$9,191</b>	
State	\$1,189	\$10,142	\$8,953	753.0%
Federal	\$1,690	\$1,512	<b>-\$178</b>	<b>-10.6%</b>
Nonpublic	\$482	\$1,315	\$833	173.0%
Unknown Public	\$0	\$0	\$0	0.0%
Unknown	\$0	\$0	\$0	0.0%

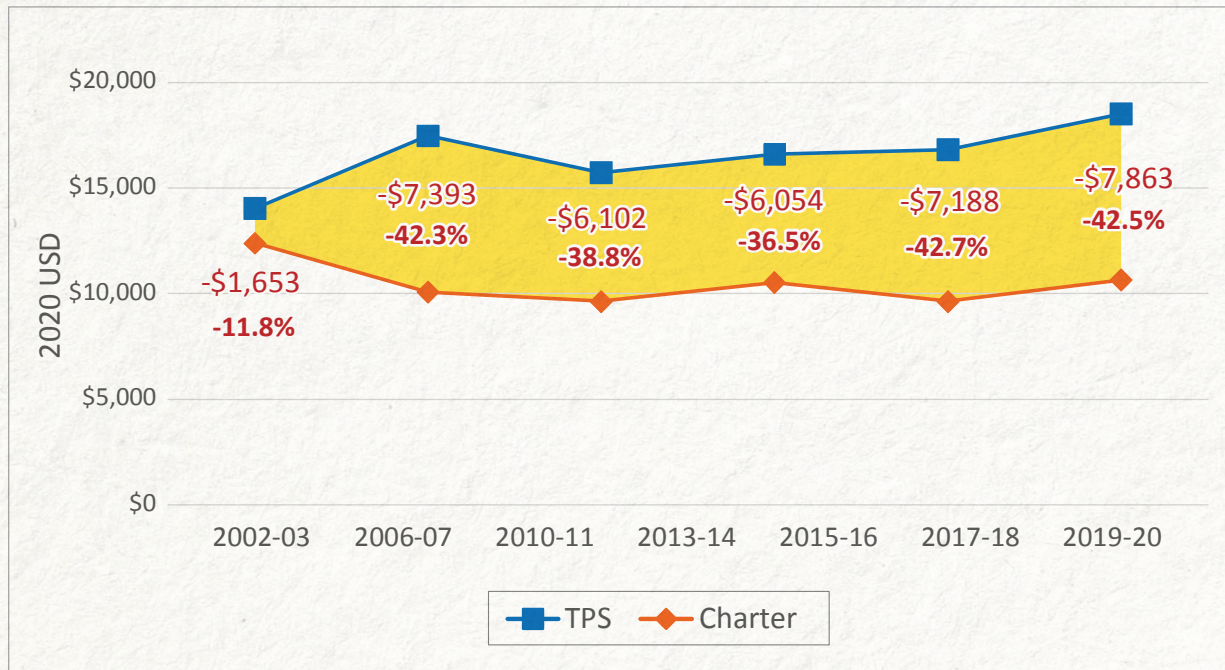
**Figure B.14: TPS and Charter Funding Per Pupil by Revenue Source in Houston – 2019-20**



## Indianapolis, Indiana

In Indianapolis, the TPS-charter school funding disparity increased from about 12 percent (\$1,653 in 2020 dollars) in 2006-07 to about 42 percent (\$7,393 in 2020 dollars) in 2010-11 and consistently earned an F in terms of charter school funding in each report thereafter, with the gap ranging from about 37 percent to 43 percent (see Figure B.15).

**Figure B.15: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Indianapolis – 2002-03 to 2019-20**

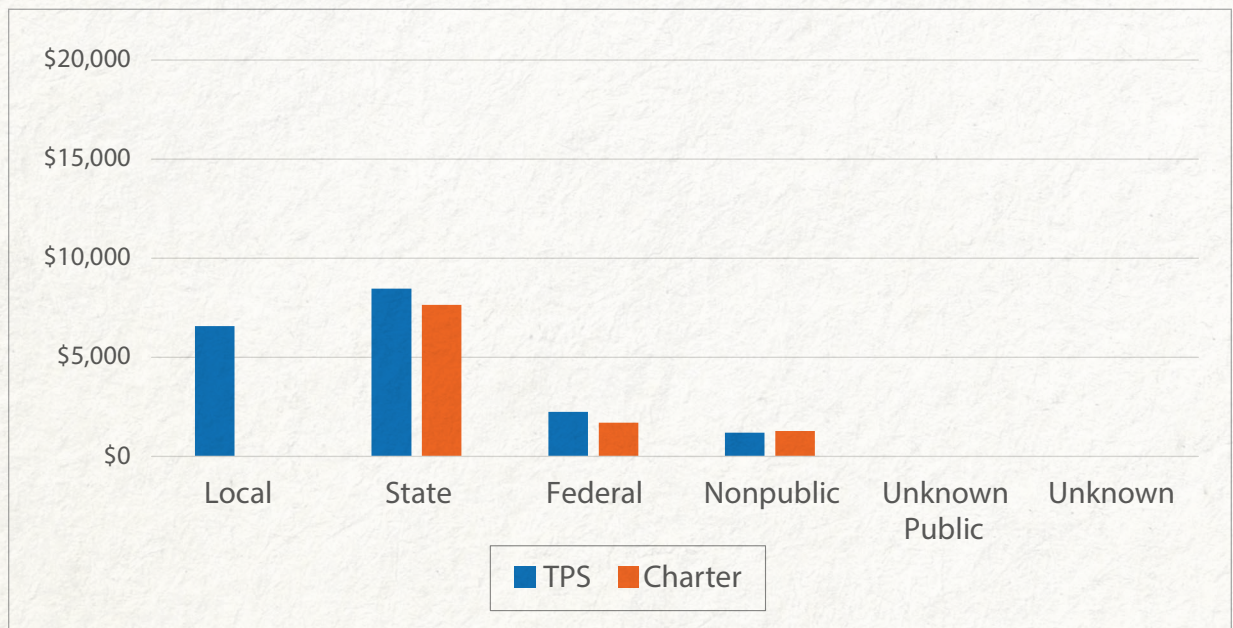


In Indianapolis, we were able to identify the source of every single dollar allocated to TPS and charter schools in 2019-20 and found that TPS receive more funding in every category except nonpublic, in which the charter school advantage is very small (only \$82 per pupil; see Table B.8 and Figure B.16). Charter schools do not receive local funding, whereas TPS receive \$6,586 per pupil in local funding (about 36 percent of all TPS funds). Charter schools receive \$7,654 per pupil in state funding (about 72 percent of all charter school funding) whereas TPS receive \$8,472 per pupil in state funding (about 46 percent of all TPS funding). Charter schools receive \$1,710 per pupil in federal funding while TPS receive \$2,251 per pupil, and charter schools receive \$1,283 per pupil in nonpublic funding while TPS receive \$1,202 per pupil.

**Table B.8: Average Disparity Per Pupil by Revenue Source in Indianapolis – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$6,586	\$0	-\$6,586	
State	\$8,472	\$7,654	-\$818	-9.7%
Federal	\$2,251	\$1,710	-\$541	-24.0%
Nonpublic	\$1,202	\$1,283	\$82	6.8%
Unknown Public	\$0	\$0	\$0	0.0%
Unknown	\$0	\$0	\$0	0.0%

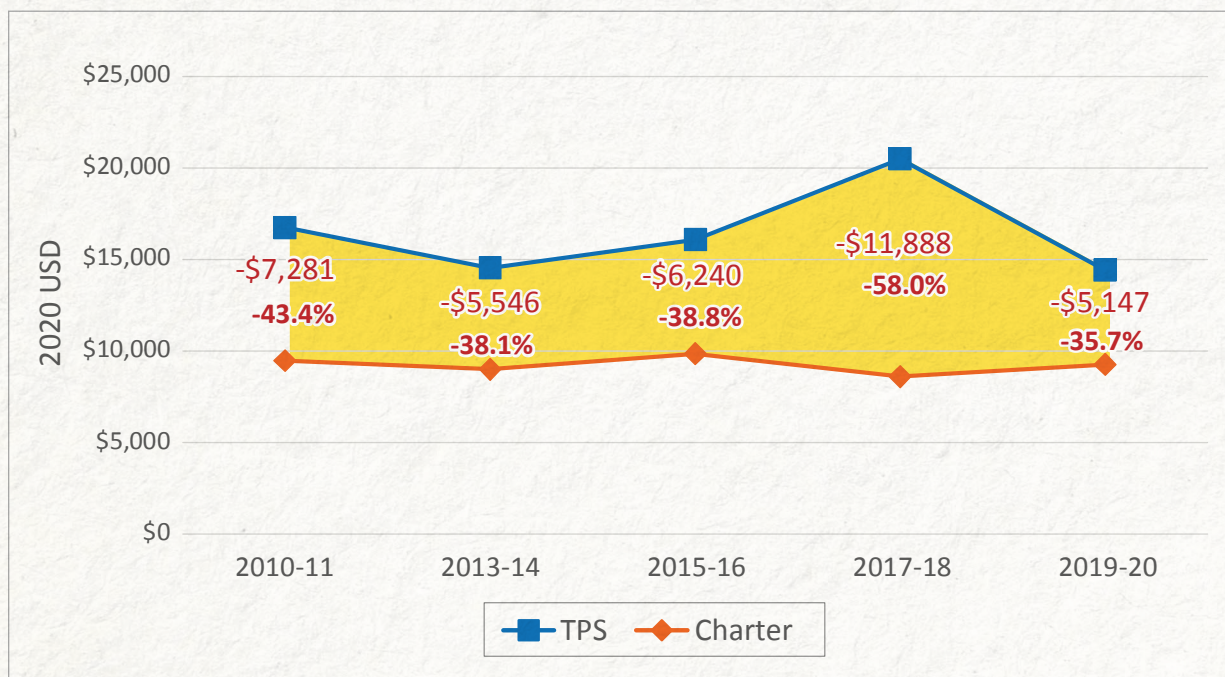
**Figure B.16: TPS and Charter Funding Per Pupil by Revenue Source in Indianapolis – 2019-20**



## Little Rock

Our team began studying charter school funding in Little Rock, Arkansas in 2010-11. In Little Rock, Arkansas, charter school funding has been on the decline (see Figure B.17). In 2017-18, TPS funding increased by about \$4,400 per pupil relative to 2015-16, increasing the TPS-charter school funding disparity to 58 percent. While the disparity decreased by about 20 percentage points from 2017-18 to 2019-20, moving the city up in our ranking from the bottom, Little Rock still earns an F for its large funding disparity in 2019-20.

**Figure B.17: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Little Rock – 2010-11 to 2019-20**



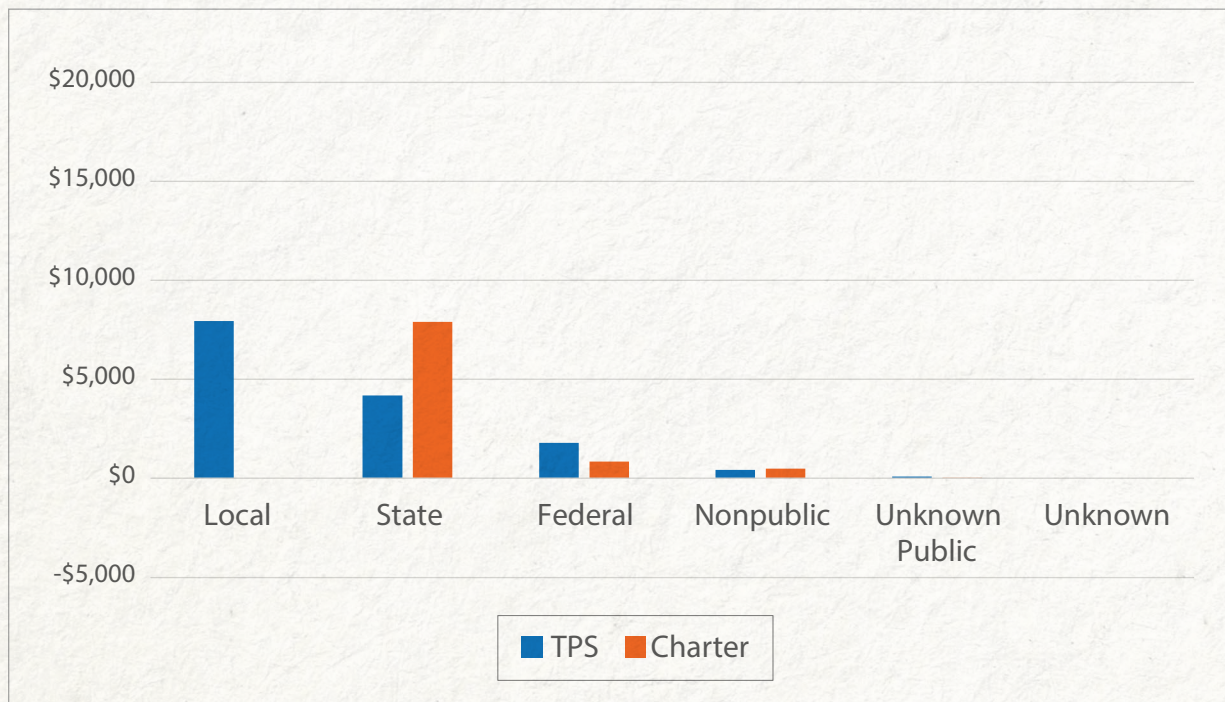


Little Rock charter schools do not receive local funds (TPS receive \$7,937 per pupil in local funds, or 55 percent of all TPS revenue; see Table B.9 and Figure B.18). However, charter schools receive more state funds than TPS (\$7,910 per pupil or about 85 percent of all charter school funding, compared to \$4,182 per pupil or 29 percent of all TPS revenue). TPS receive \$1,786 compared to \$853 per pupil in federal funds and \$93 compared to \$24 per pupil in unknown public funds, but charter schools receive \$492 compared to \$427 per pupil in nonpublic funds.

**Table B.9: Average Disparity Per Pupil by Revenue Source in Little Rock – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$7,937	\$0	<b>-\$7,937</b>	
State	\$4,182	\$7,910	\$3,728	89.1%
Federal	\$1,786	\$853	<b>-\$933</b>	<b>-52.2%</b>
Nonpublic	\$427	\$492	\$65	15.1%
Unknown Public	\$93	\$24	<b>-\$69</b>	<b>-74.2%</b>
Unknown	\$0	\$0	\$0	0.0%

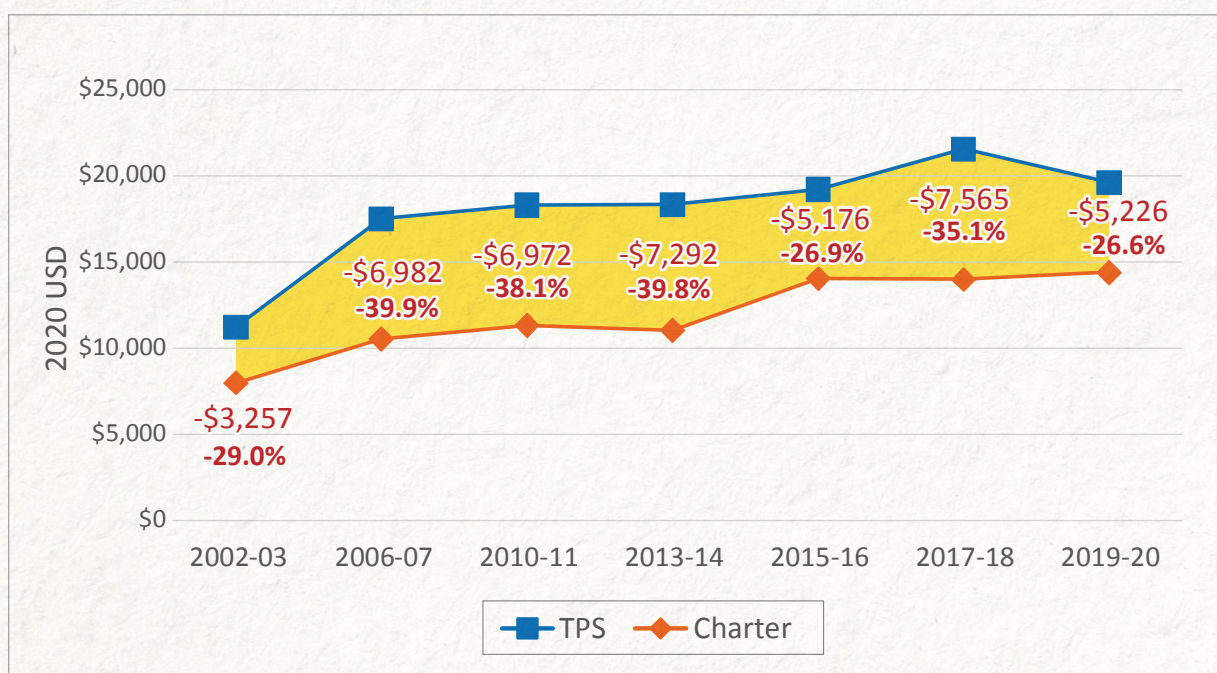
**Figure B.18: TPS and Charter Funding Per Pupil by Revenue Source in Little Rock – 2019-20**



## Los Angeles

In Los Angeles, California, the TPS-charter school funding disparity fluctuated from 2002-03 to 2019-20, ranging between 27 and 40 percent (see Figure B.19). The disparity decreased by about 8 percentage points from about 35 percent or \$7,565 (2020 dollars) in 2017-18 to about 27 percent or \$5,226 in 2019-20. The disparity is smaller than it was in 2013-14, when the California Legislature passed the Local Control Funding Formula, a weighted student funding formula. We investigated charter school funding in Los Angeles in depth in a previous case study and found that student need cannot explain the large disparity that still remains.<sup>69</sup> Los Angeles still earns an F in terms of funding equity.

**Figure B.19: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Los Angeles – 2002-03 to 2019-20**



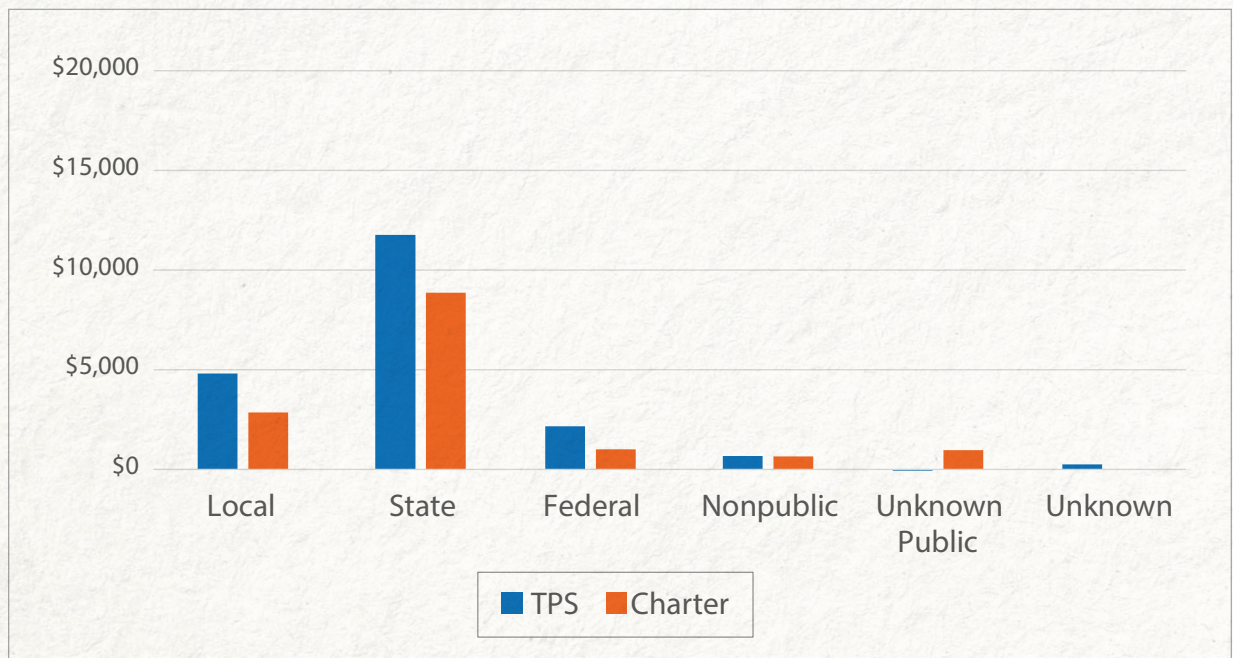
In Los Angeles, TPS receive more funding than charter schools in every category except for unknown public funds (see Figure B.20). We attribute \$55 per pupil to TPS as a debit because of in-kind services to charter schools. We attribute these funds to charter schools as a credit, bringing the total charter school unknown public amount to \$975 per pupil. Charter schools receive less LCFF funding (the primary state funding subcategory) per pupil than TPS, even though the two sectors have similar demographics, resulting in a \$2,903 disparity per pupil in state funding (\$11,769 per pupil for TPS and \$8,866 per pupil for charter schools). In the local fund category, TPS receive \$4,808 per pupil compared to \$2,863 per pupil for charter schools, and in the federal funding category, TPS receive \$2,166 per pupil compared to \$1,027 per pupil

for charter schools. Additionally, TPS receive \$690 per pupil compared to charter schools' \$655 per pupil in nonpublic funds, as well as \$252 per pupil compared to charter schools' \$18 per pupil in unknown funds. For further information on charter school funding disparities in Los Angeles in 2019-20, see our Los Angeles case study.

**Table B.10: Average Disparity Per Pupil by Revenue Source in Los Angeles – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$4,808	\$2,863	-\$1,945	-40.5%
State	\$11,769	\$8,866	-\$2,903	-24.7%
Federal	\$2,166	\$1,027	-\$1,139	-52.6%
Nonpublic	\$690	\$655	-\$36	-5.2%
Unknown Public	-\$55	\$975	\$1,030	1,871.0%
Unknown	\$252	\$18	-\$234	-92.8%

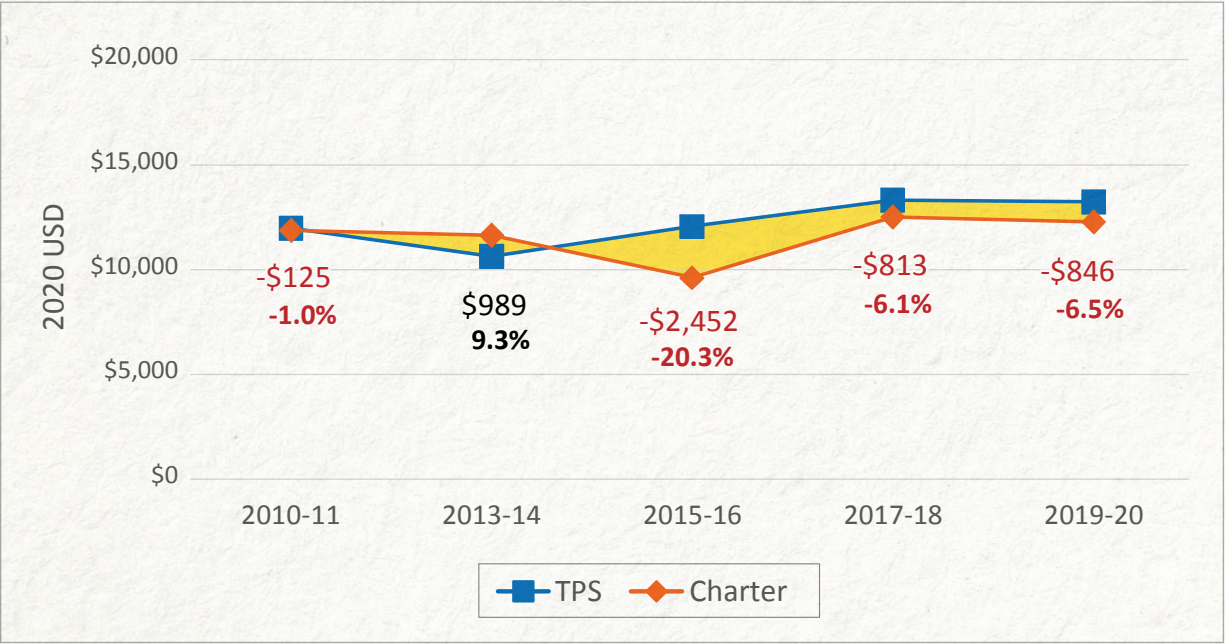
**Figure B.20: TPS and Charter Funding Per Pupil by Revenue Source in Los Angeles – 2019-20**



# Memphis, Tennessee

When we first studied Memphis in 2010-11, we found virtually no difference between TPS and charter school funding. However, we found about a nine percent gap, favoring charter schools, in 2013-14. Charter school funding then decreased from while TPS funding increased from 2013-14 to 2015-16, flipping the disparity to favor TPS and increasing the magnitude to 20 percent. Charter school funding then increased from 2015-16 to 2017-18, decreasing the gap to about six percent (favoring TPS). In 2019-20, the disparity was \$846 or about seven percent, favoring TPS, moving Memphis from first to second place in terms of funding equity and from an A to a B rating since our 2017-18 report.

**Figure B.21: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Memphis – 2010-11 to 2019-20**



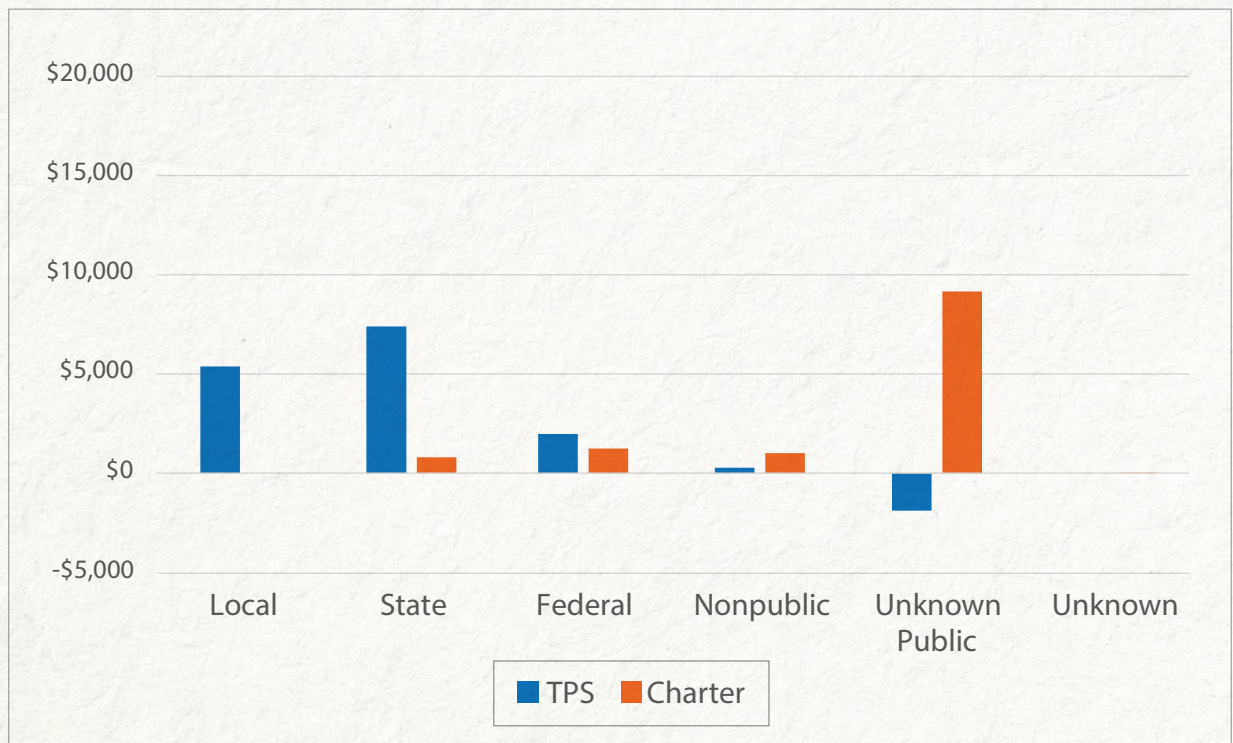
In Memphis, charter schools receive no local funds directly, while TPS receive \$5,384 per pupil (about 36 percent of all TPS revenue in 2019-20; see Figure B.22). In addition, TPS receive significantly more state funds than charter schools: \$7,406 or about 50 percent of all TPS funds compared to \$807 per pupil or 7 percent of all charter school funds. However, we attribute \$1,952 per pupil (a combination of state and local pass-through funds and in-kind facilities support) to TPS as a debit and attribute these funds to charter schools as a credit, bringing the total per-pupil amount of unknown public funds for charter schools to \$9,167 per pupil, the main source of all funds (about 75 percent of all charter school revenue). Charter schools receive more nonpublic funds than TPS (\$1,008 per pupil compared to \$283 per

pupil). Charter schools also receive a small amount of unknown funds (\$31 per pupil) while TPS do not receive any unknown funds.

**Table B.11: Average Disparity Per Pupil by Revenue Source in Memphis – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$5,384	\$0	<b>-\$5,384</b>	
State	\$7,406	\$807	<b>-\$6,598</b>	<b>-89.1%</b>
Federal	\$1,990	\$1,251	<b>-\$739</b>	<b>-37.2%</b>
Nonpublic	\$283	\$1,008	\$725	255.7%
Unknown Public	<b>-\$1,952</b>	\$9,167	\$11,119	569.6%
Unknown	\$0	\$31	\$31	

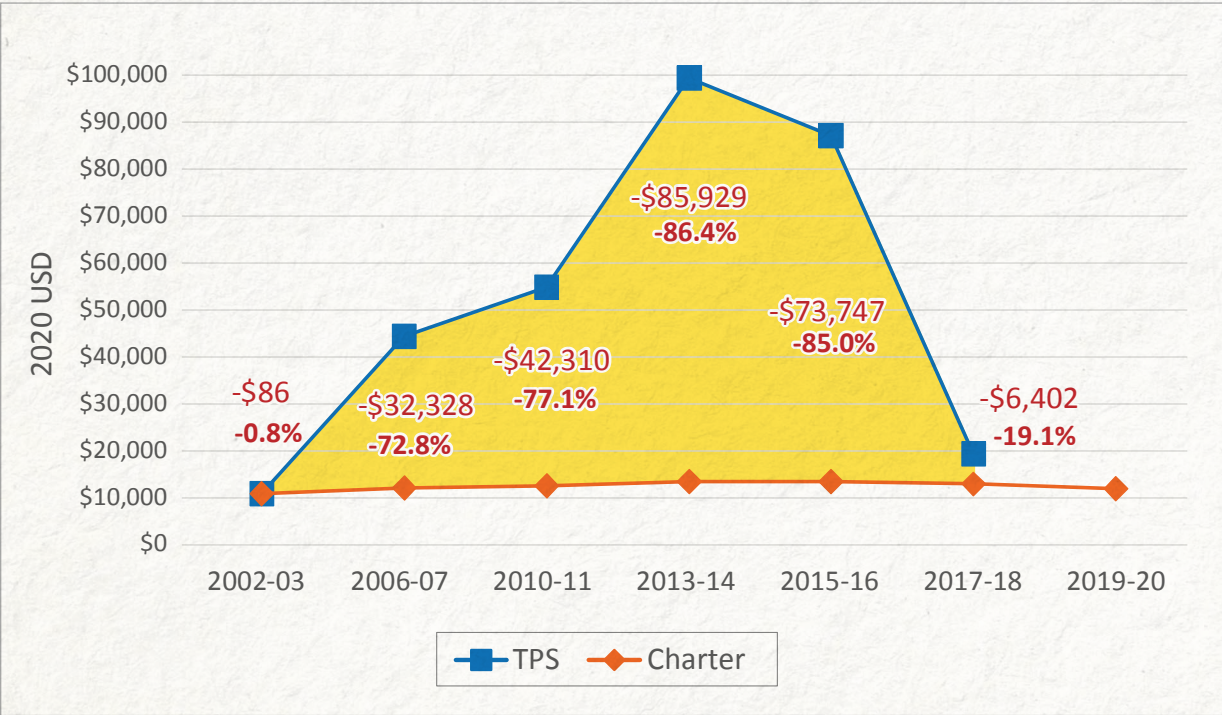
**Figure B.22: TPS and Charter Funding Per Pupil by Revenue Source in Memphis – 2019-20**



# New Orleans

Making a TPS-charter school comparison in New Orleans, Louisiana has been a challenge because of the declining number of TPS since charter schools became the default in the wake of Hurricane Katrina; only three TPS remained in operation in 2019-20. Therefore, in 2019-20, we consider New Orleans to be an all-charter sector. However, since 2002-03 until 2017-18, we examined the TPS-charter school funding disparity in New Orleans, finding that charter school funding, even after Hurricane Katrina hit in 2005, has stayed essentially the same, while TPS received large amounts of funding from the federal government for the purpose of rebuilding.

**Figure B.23: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in New Orleans – 2002-03 to 2019-20**



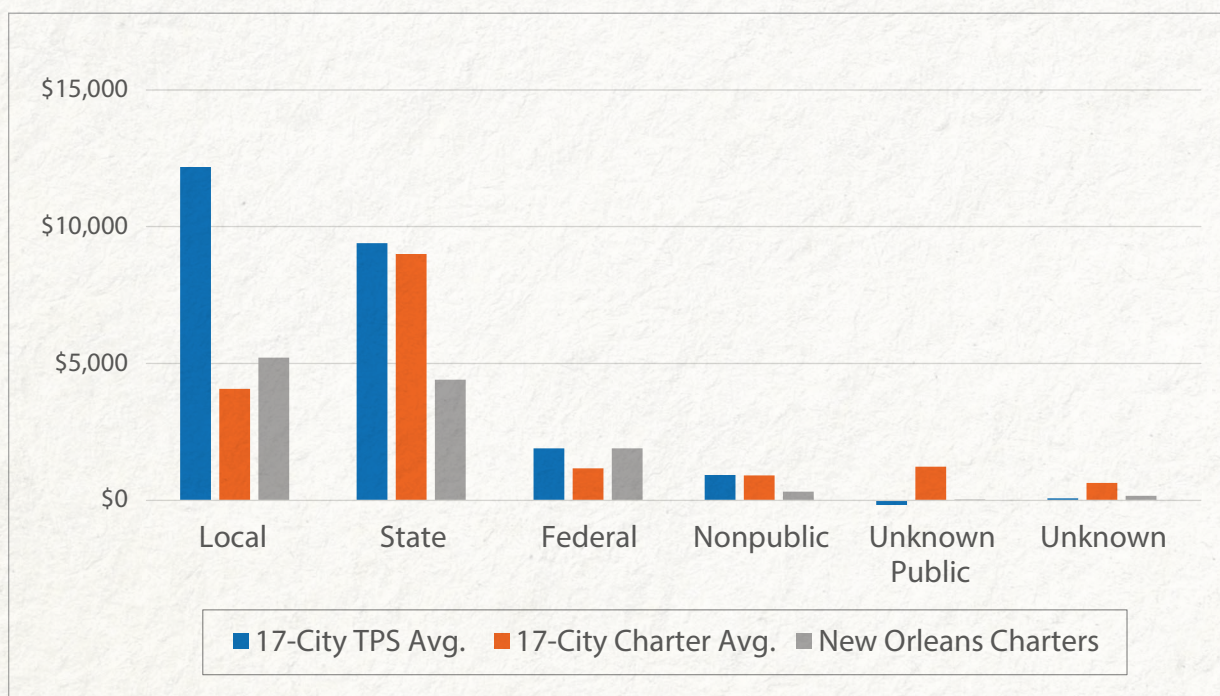
In New Orleans, charter schools receive \$5,212 per pupil (about 43 percent of all charter school funding in 2019-20) in local revenue, \$4,405 (about 37 percent) in state revenue, \$1,905 (about 16 percent) in federal revenue, \$314 (about three percent) in nonpublic revenue, \$21 (0.2 percent) in unknown public revenue, and \$170 (about one percent) in unknown revenue. Compared to the average per-pupil amounts for TPS across the other 17 cities in 2019-20, New Orleans charters receive less than half the amount of local funds, less than half the amount of state funds, about the same amount of federal funds, less than half the amount of nonpublic funds, more (though a very small amount of) unknown public funds (the TPS

average is negative because of in-kind services), and more unknown public funds. Compared to the charter school averages, New Orleans charters receive more local funds, about half the amount of state funds, about a third of the amount of nonpublic funds, about \$1,200 less in unknown public funds, and less than a third of the amount of unknown funds.

**Table B.12: Average Disparity Per Pupil by Revenue Source in New Orleans – 2019-20**

Revenue Source	New Orleans Charter Per-Pupil Revenue	17-City TPS Avg. Per-Pupil Revenue	17-City Charter Avg. Per-Pupil Revenue	New Orleans TPS Per-Pupil Disparity	New Orleans Charter Per-Pupil Disparity
Local	\$5,212	\$12,181	\$4,086	\$8,094	\$1,126
State	\$4,405	\$9,397	\$9,040	\$357	<b>-\$4,635</b>
Federal	\$1,905	\$1,902	\$1,181	\$721	\$723
Nonpublic	\$314	<b>-\$172</b>	\$1,233	<b>-\$1,405</b>	<b>-\$919</b>
Unknown Public	\$21	\$921	\$905	\$16	<b>-\$884</b>
Unknown	\$170	\$66	\$643	<b>-\$577</b>	<b>-\$473</b>

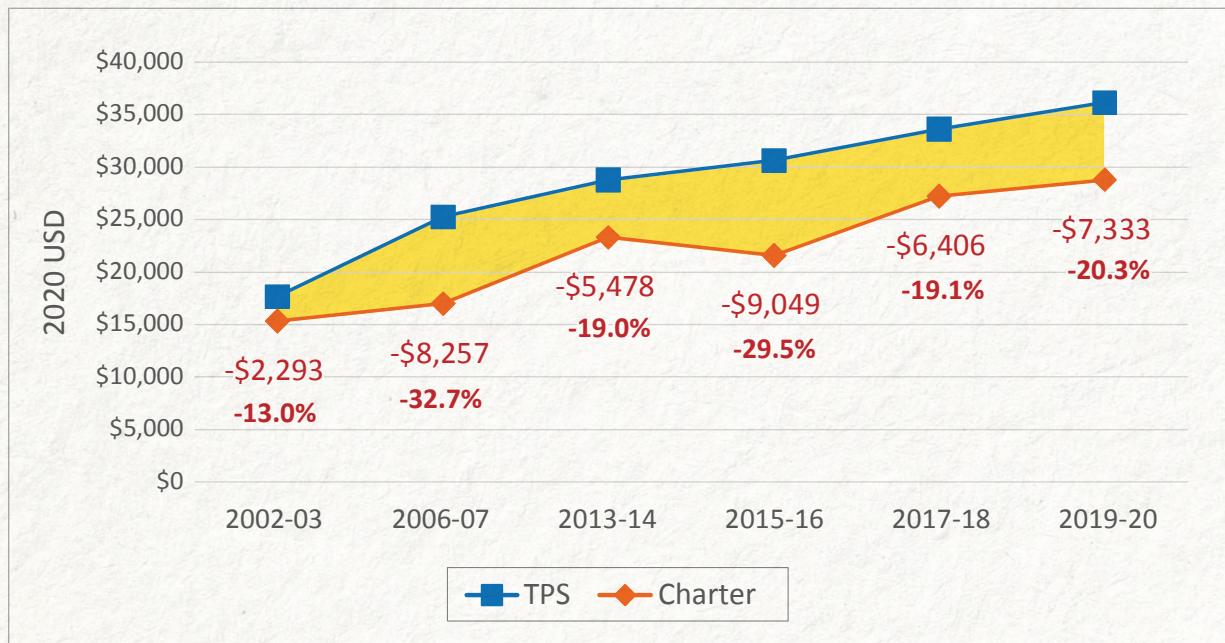
**Figure B.24: Overall TPS, Overall Charter & NOLA Charter Funding Per Pupil by Revenue Source in New Orleans – 2019-20**



## New York City

In New York City, both TPS and charter school funding increased steadily from 2002-03 to 2019-20, maintaining a significant gap between the two sectors' funding. Although the gap closed by about 11 percentage points from 2015-16 to 2017-18, it continues to be about 20 percent, therefore once again earning the city a D for its funding disparity.

**Figure B.25: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in New York City – 2002-03 to 2019-20**



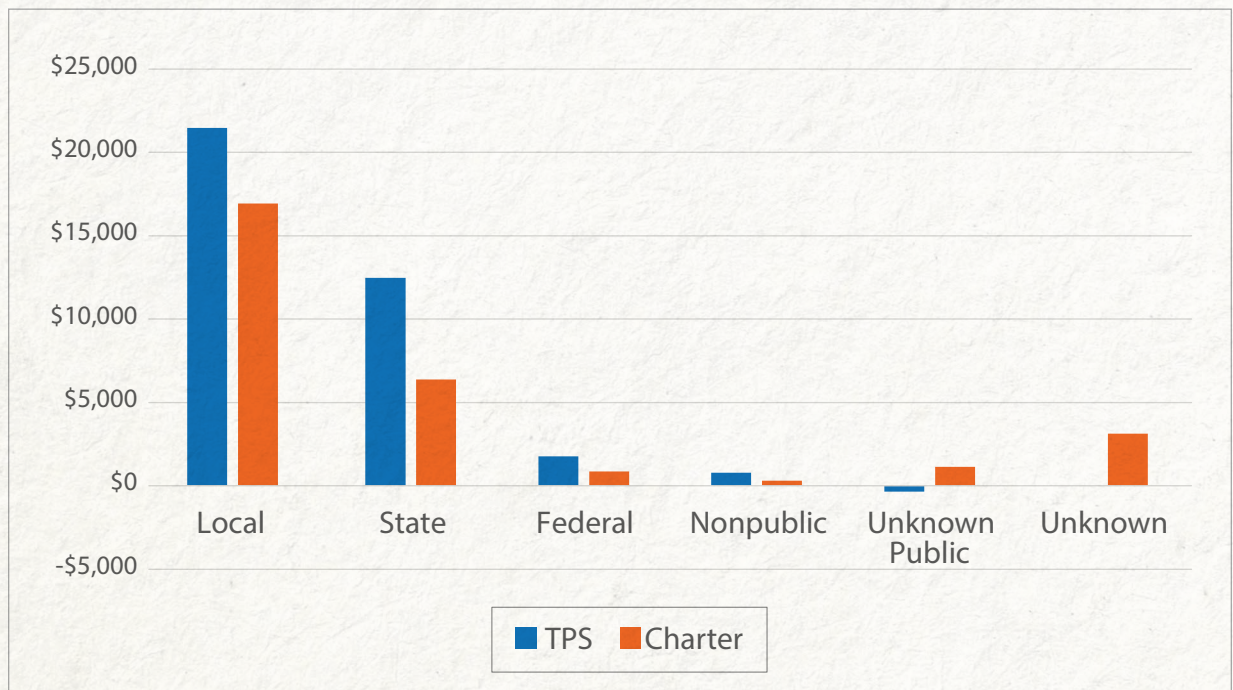


In New York City, TPS receive \$4,523 more per pupil (about 21 percent) in local funds, \$6,095 more per pupil (about 49 percent) in state funds, \$891 more per pupil (about 51 percent) in federal funds, and \$465 more per pupil (about 44 percent) in nonpublic funds, relative to charter schools (2019-20 data; see Table B.13 and Figure B.26). Charter schools receive more unknown public funds (\$1,501 more per pupil) and more unknown funds (\$3,139 more per pupil) relative to TPS. In the unknown public category, we attribute \$354 per pupil as a debit to TPS and attribute those funds to charter schools as a credit for pass-through funds.

**Table B.13: Average Disparity Per Pupil by Revenue Source in New York City – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$21,468	\$16,944	<b>-\$4,523</b>	<b>-21.1%</b>
State	\$12,474	\$6,379	<b>-\$6,095</b>	<b>-48.9%</b>
Federal	\$1,756	\$868	<b>-\$888</b>	<b>-50.6%</b>
Nonpublic	\$782	\$317	<b>-\$465</b>	<b>-59.5%</b>
Unknown Public	<b>-\$354</b>	\$1,147	\$1,501	424.0%
Unknown	\$0	\$3,139	\$3,139	

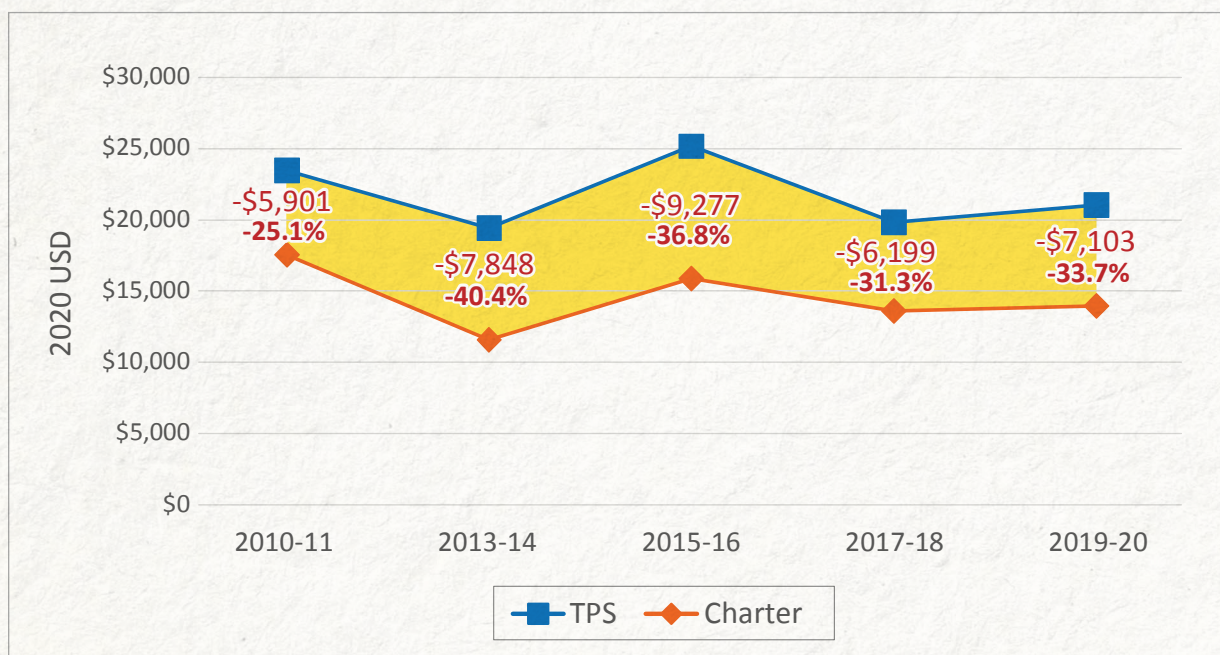
**Figure B.26: TPS and Charter Funding Per Pupil by Revenue Source in New York City – 2019-20**



## Oakland

Our team began studying charter school funding equity in Oakland in 2010-11 and found that there has consistently been a gap of at least 25 percent (up to 40 percent) between TPS and charter school funding in each of our analyses. In 2019-20, we found a gap of about \$7,100 or 34 percent, earning Oakland an F for its charter funding equity.

**Figure B.27: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Oakland – 2010-11 to 2019-20**

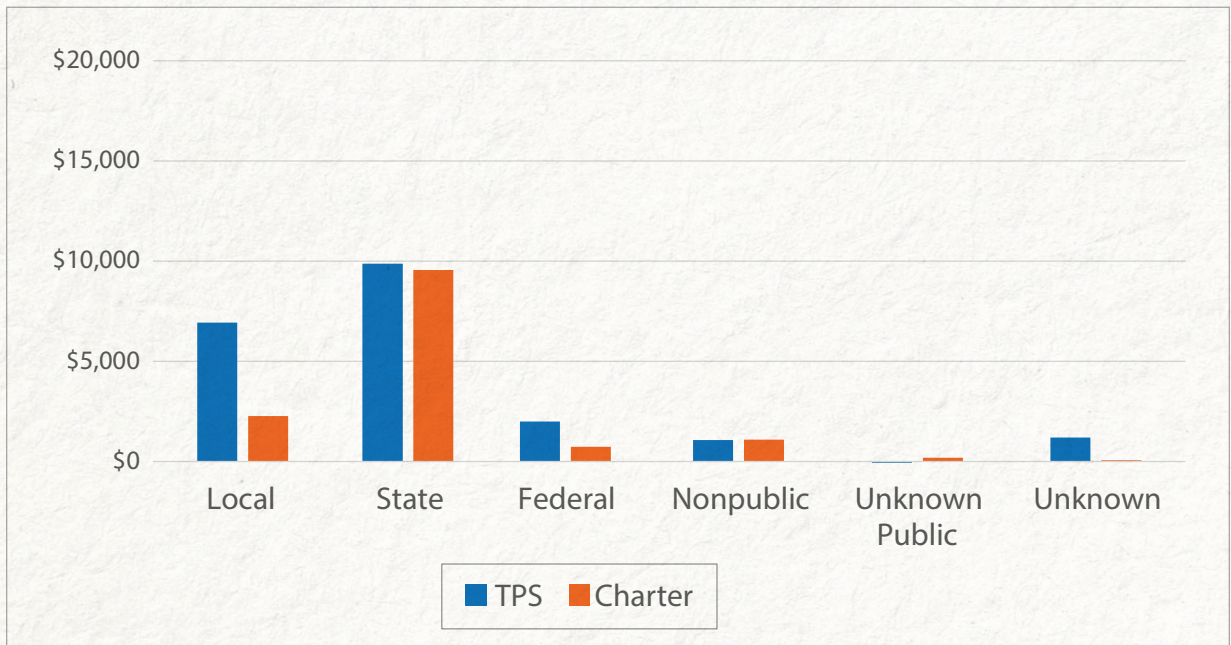


In Oakland, TPS receive more local (\$4,642 more per pupil), state (\$325 per pupil), federal (\$1,262 per pupil), and unknown (\$1,151 per pupil) funds relative to charter schools (2019-20 data; see Table B.14 and Figure B.28). Charter schools receive slightly more nonpublic funds (\$12 more per pupil) and more unknown public funds (\$206 per pupil compared to a debit of \$58 per pupil for TPS due to in-kind funds for use of facilities).

**Table B.14: Average Disparity Per Pupil by Revenue Source in Oakland – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$6,928	\$2,286	<b>-\$4,642</b>	<b>-67.0%</b>
State	\$9,883	\$9,558	<b>-\$325</b>	<b>-3.3%</b>
Federal	\$2,011	\$749	<b>-\$1,262</b>	<b>-62.8%</b>
Nonpublic	\$1,085	\$1,097	\$12	1.1%
Unknown Public	<b>-\$58</b>	\$206	\$265	453.1%
Unknown	\$1,214	\$63	<b>-\$1,151</b>	<b>-94.8%</b>

**Figure B.28: TPS and Charter Funding Per Pupil by Revenue Source in Oakland – 2019-20**

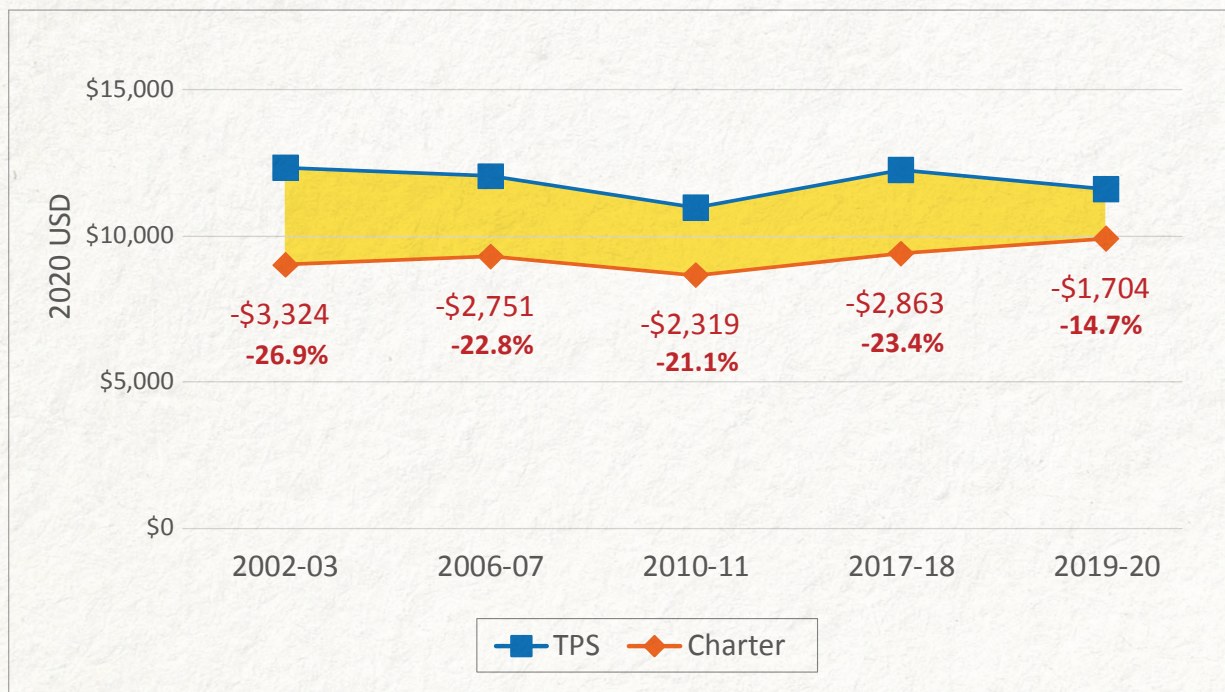


Oakland and Los Angeles operate under the same funding formula. California partially funds both TPS and charter school students through the LCFF, which weights students more heavily if they are in poverty (eligible for free- and reduced-price lunch), ELLs, or in foster care. Generally, Los Angeles and Oakland have similar proportions of students in poverty and ELLs and in both cities, the TPS and charter school populations in terms of student needs.<sup>70</sup> Oakland TPS receive about \$21,000 per pupil while Los Angeles TPS receive about \$19,600 per pupil, and Oakland charter schools receive about \$14,000 per pupil while Los Angeles charter schools receive about \$14,400 per pupil (2019-20 data). The disparity is larger by nearly \$2,000 in Oakland, driven by Oakland TPS receiving more local funding per pupil (almost \$7,000 per pupil) compared to Los Angeles TPS (about \$4,800 per pupil).

## Phoenix, Arizona

Our team began studying charter school funding in Phoenix in 2002-03 and watched the funding disparity slowly decrease through 2010-11. We studied Phoenix again in 2017-18 and found the disparity to be virtually unchanged. In 2019-20, the disparity had decreased by about eight percentage points. With an approximately 15 percent (\$1,700) disparity in 2019-20, Phoenix earned a C for its charter funding equity.

**Figure B.29: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Phoenix – 2002-03 to 2019-20**

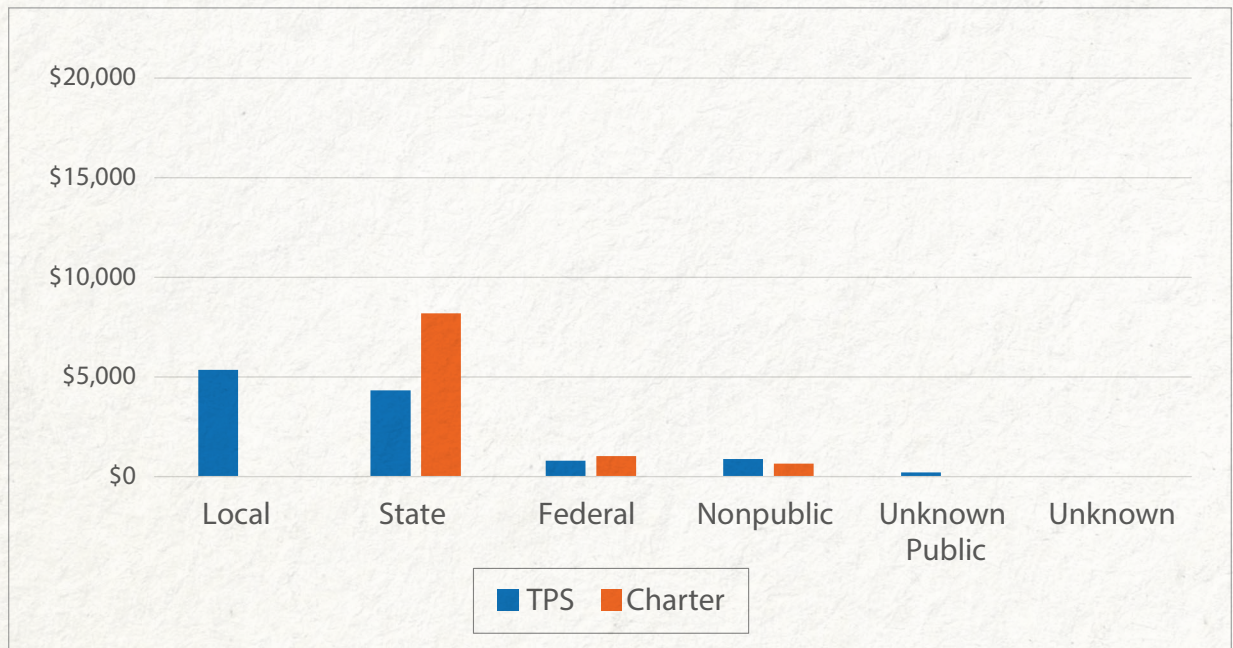


We were able to identify the source of all funds flowing to TPS and charter schools in Phoenix in 2019-20 (see Table B.15 and Figure B.30). Charter schools in Phoenix do not receive any local funding, while TPS receive \$5,353 per pupil in local funding. In lieu of local funding, charter schools receive extra state funding (\$8,208 per pupil) relative to TPS (\$4,331 per pupil) and, in addition, receive more federal funding per pupil (\$223 more per pupil). However, TPS receive more nonpublic funding (\$236 more per pupil) and more unknown public funding (\$215 per pupil compared to \$0 per pupil for charter schools).

**Table B.15: Average Disparity Per Pupil by Revenue Source in Phoenix – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$5,353	\$0	<b>-\$5,353</b>	
State	\$4,331	\$8,208	\$3,878	89.5%
Federal	\$811	\$1,033	\$223	27.5%
Nonpublic	\$900	\$663	<b>-\$236</b>	<b>-26.3%</b>
Unknown Public	\$215	\$0	<b>-\$215</b>	
Unknown	\$0	\$0	\$0	

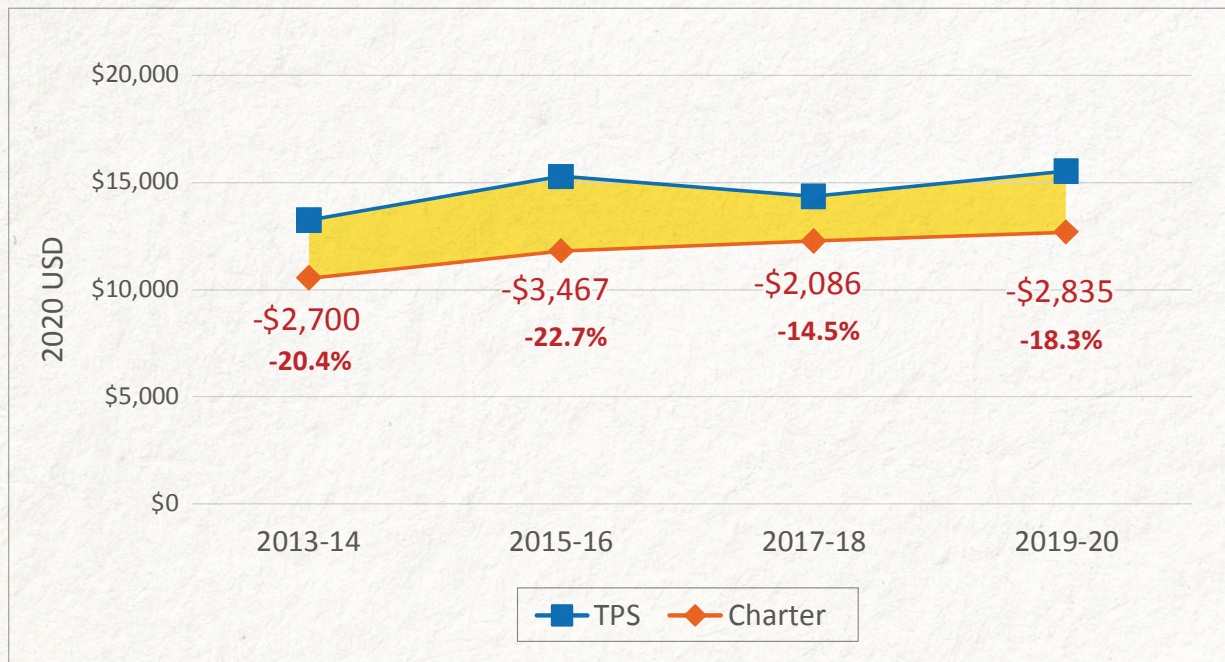
**Figure B.30: TPS and Charter Funding Per Pupil by Revenue Source in Phoenix – 2019-20**



## San Antonio, Texas

Our team began studying San Antonio in 2013-14 and have found a moderate disparity between TPS and charter school funding in each analysis (see Figure B.31). The disparity increased slightly (from about 15 percent to 18 percent, or \$2,835) from 2017-18 to 2019-20, downgrading San Antonio from a B (in 2017-18) to a C in 2019-20.

**Figure B.31: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in San Antonio – 2013-14 to 2019-20**

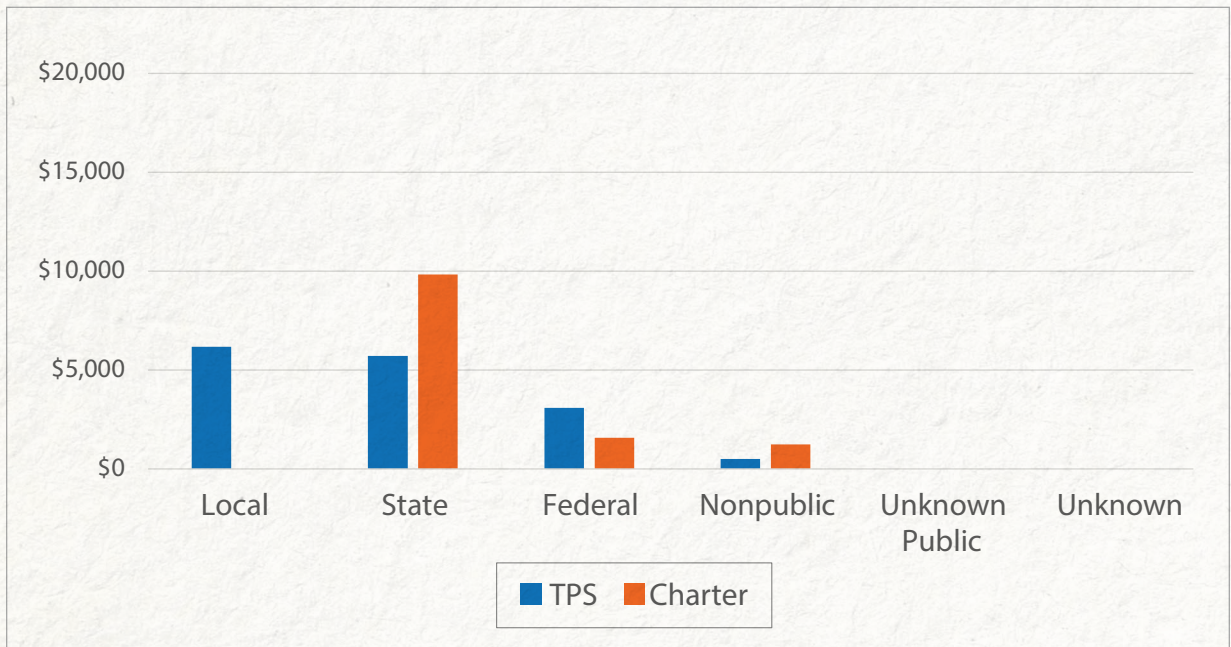


We were able to identify the source of all funds flowing to TPS and charter schools in San Antonio in 2019-20 (see Table B.16 and Figure B.32). While TPS receive \$6,180 per pupil in local funds, charter schools receive no local funds, but receive more state funds (\$9,845 per pupil compared to \$5,725 per pupil for TPS). While TPS receive more federal funds (\$3,095 per pupil) than charter schools (\$1,592 per pupil), charter schools receive more nonpublic funds (\$1,242 per pupil) than TPS (\$514 per pupil).

**Table B.16: Average Disparity Per Pupil by Revenue Source in San Antonio – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$6,180	\$0	<b>-\$6,180</b>	
State	\$5,725	\$9,845	\$4,120	72.0%
Federal	\$3,095	\$1,592	<b>-\$1,503</b>	<b>-48.6%</b>
Nonpublic	\$514	\$1,242	\$728	141.8%
Unknown Public	\$0	\$0	\$0	
Unknown	\$0	\$0	\$0	

**Figure B.32: TPS and Charter Funding Per Pupil by Revenue Source in San Antonio – 2019-20**

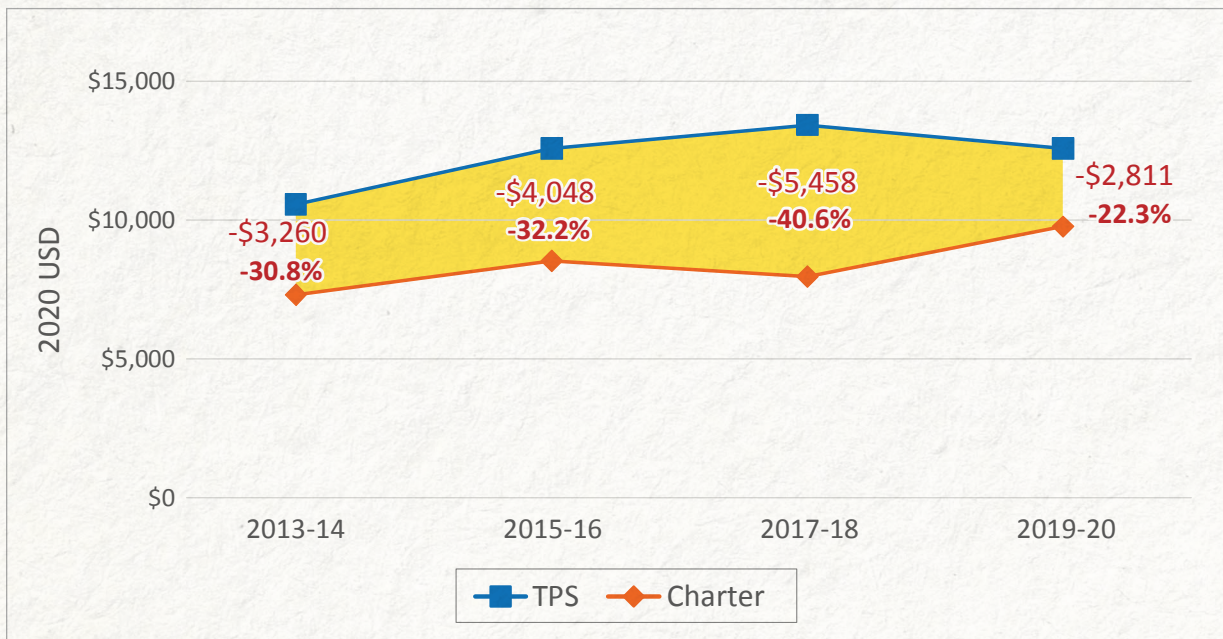


Schools in Houston and San Antonio are funded by the same state mechanisms, but a few key differences result in Houston’s funding disparity being much smaller (about three percent) and favoring charter schools over TPS in 2019-20, while San Antonio’s funding disparity is over 18 percent and favored TPS.<sup>71</sup> Houston TPS receive about \$3,000 per pupil less than San Antonio TPS do (\$12,969 versus \$15,514 per pupil), while Houston and San Antonio charters are funded very similarly (\$12,969 versus \$12,678 per pupil). The difference seems to be primarily driven by federal funding—Houston TPS receive \$1,690 per pupil while San Antonio TPS receive \$3,095 per pupil.

## Tulsa, Oklahoma

Our team began studying charter school funding in Tulsa in 2013-14 and watched the disparity between TPS and charter schools grow by about 10 percentage points between that analysis and our 2017-18 analysis (see Figure B.33). However, an increase in charter school funding, paired with a slight decrease in TPS funding, from 2017-18 to 2019-20 decreased the disparity by nearly 20 percentage points, promoting Tulsa from an F rating in 2017-18 to a D rating in 2019-20.

**Figure B.33: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Tulsa – 2013-14 to 2019-20**



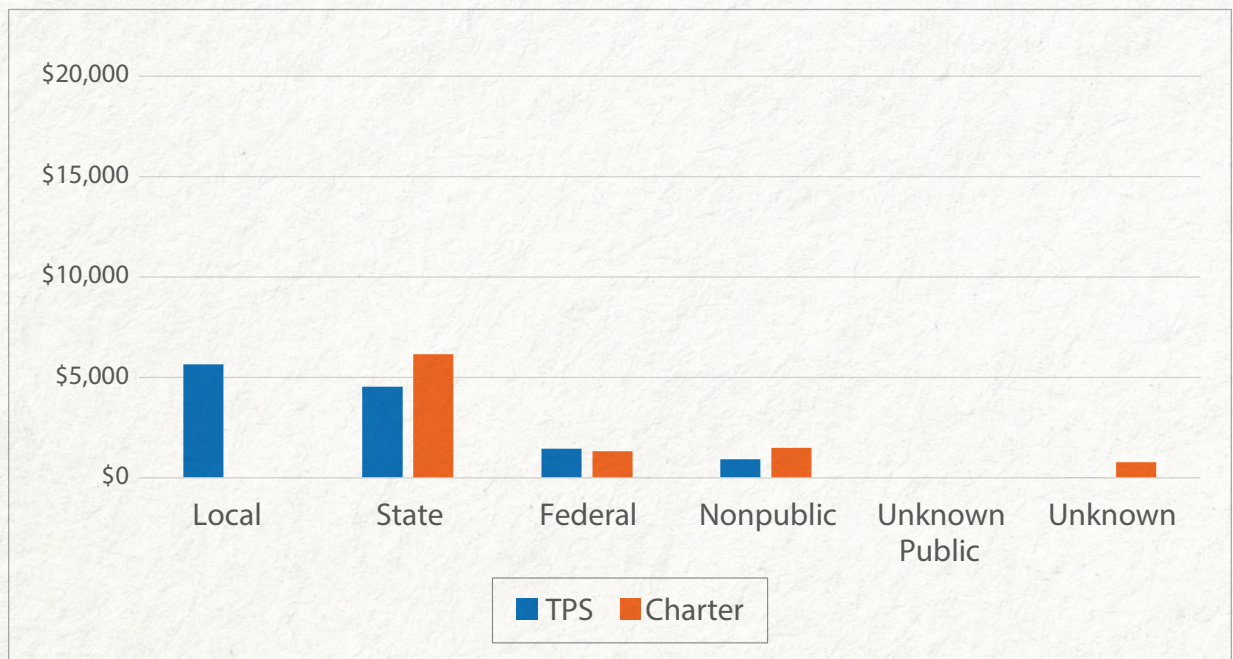


Charter schools in Tulsa do not receive local funding, while TPS receive \$5,658 per pupil in local funds (2019-20 data; see Table B.17 and Figure B.34); TPS also receive about nine percent more federal funds (\$1,457 compared to \$1,322 per pupil). Charter schools receive \$6,155 per pupil in state funding while TPS receive \$4,536 per pupil. Charter schools also receive more nonpublic funding (\$1,501 compared to \$930 per pupil) and more unknown funding (\$792 compared to \$1 per pupil) relative to TPS.

**Table B.17: Average Disparity Per Pupil by Revenue Source in Tulsa – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$5,658	\$0	<b>-\$5,658</b>	
State	\$4,536	\$6,155	\$1,619	35.7%
Federal	\$1,457	\$1,322	<b>-\$135</b>	<b>-9.3%</b>
Nonpublic	\$930	\$1,501	\$572	61.5%
Unknown Public	\$0	\$0	\$0	
Unknown	\$1	\$792	\$791	66,423.0%

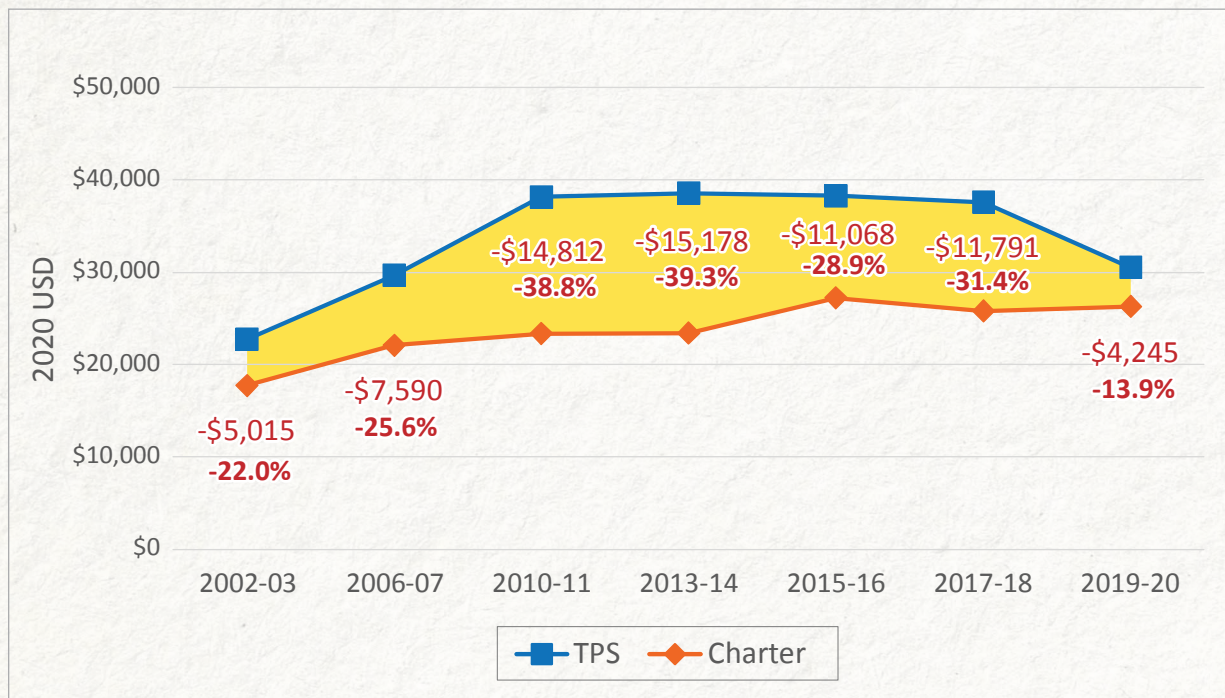
**Figure B.34: TPS and Charter Funding Per Pupil by Revenue Source in Tulsa – 2019-20**



## Washington, DC

Our team has studied charter school funding equity in Washington, DC since 2002-03 (see Figure B.35). While the disparity widened in the early 2010s, it decreased from 2017-18 to 2019-20, showing marked improvement. With only a 14 percent disparity in 2019-20, DC improved from an F to a C grade.

**Figure B.35: Longitudinal Trends in TPS and Charter School Per-Pupil Funding in Washington, DC – 2002-03 to 2019-20**

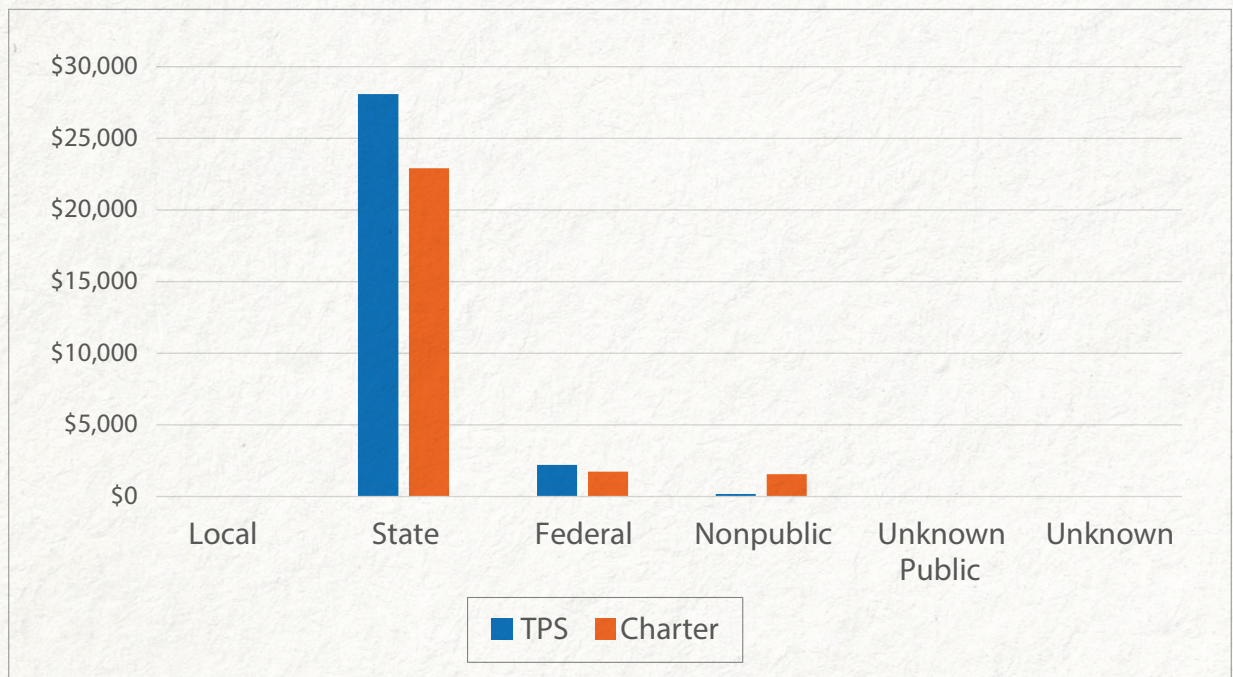


Neither TPS nor charter schools receive local funding in DC (see Table B.18 and Figure B.36). The majority of funding for both, where we see the driver of the remaining disparity, is in the “state” category (although DC is not a state, we consider it as such for this analysis). While charter schools receive \$22,915 per pupil in state funding, TPS receive \$28,077 per pupil, and also receive \$483 more per pupil in federal funding (2019-20 data). Charter schools receive \$1,369 more per pupil in nonpublic funding compared to TPS.

**Table B.18: Average Disparity Per Pupil by Revenue Source in Washington, DC – 2019-20**

Revenue Source	TPS Per-Pupil Revenue	Charter Per-Pupil Revenue	Disparity Per Student (\$ Per Pupil)	Disparity (%)
Local	\$0	\$0	\$0	
State	\$28,077	\$22,915	<b>-\$5,161</b>	<b>-18.4%</b>
Federal	\$2,230	\$1,748	<b>-\$483</b>	<b>-21.6%</b>
Nonpublic	\$193	\$1,562	\$1,369	707.5%
Unknown Public	\$17	\$13	<b>-\$3</b>	<b>-20.5%</b>
Unknown	\$0	\$34	\$34	

**Figure B.36: TPS and Charter Funding Per Pupil by Revenue Source in Washington, DC – 2019-20**



## Endnotes

- 1 [https://nces.ed.gov/programs/digest/d22/tables/dt22\\_216.20.asp](https://nces.ed.gov/programs/digest/d22/tables/dt22_216.20.asp)
- 2 <https://data.publiccharters.org/digest/charter-school-data-digest/how-many-charter-schools-and-students-are-there/>
- 3 <https://nces.ed.gov/programs/coe/indicator/cgb/public-charter-enrollment>
- 4 The National Alliance for Public Charter Schools (NAPCS) classifies about 29 percent of all public school students in Camden as charter school students, while we classify about 59 percent as such. This is because our policy in all of our charter school funding reports has been to classify any publicly-funded educational entity operating independently of the school district to be a charter school, therefore identifying three mastery schools (KIPP: Cooper Norcross, Camden Prep Inc., and Mastery Schools of Camden Inc.) as charter schools. However, NAPCS classifies those schools as TPS because they are listed as such on the New Jersey Department of Education website. We also consider Renaissance Schools to be charter schools. <https://data.publiccharters.org/digest/tables-and-figures/school-district-enrollment-share/>
- 5 <https://newschoolsforneworleans.org/data-resources/nola-faqs/#:>
- 6 <https://data.publiccharters.org/digest/charter-school-data-digest/who-authorizes-charter-schools/>
- 7 Stewart, T., & Wolf, P. J. (2014). *The school choice journey: School vouchers and the empowerment of urban families*. Palgrave MacMillan.
- 8 Although this is currently the case, a challenge is underway in Oklahoma. Murphy, S. (2023, June 5). [Oklahoma school board approves what would be the 1st taxpayer-funded religious school in the U.S.](#) *Associated Press*.
- 9 Fox, R. A., & Buchanan, N. K. (2014). *Proud to be different: Ethnocentric niche charter schools in America*. Rowman & Littlefield.
- 10 Barrows, S., Peterson, P. E., & West, M. R. (2017). [What do parents think of their children's schools?](#) *Education Next*, 17(2).
- 11 Raymond, M. E., Woodworth, J. L., Lee, W. F., Bachofer, S., Cotter Mazzola, M. E., Snow, W. D., and Sabkova, T. (2023). [As a matter of fact: The national charter school study III 2023](#). Center for Research on Education Outcomes; Cremata, E., Davis, D., Dickey, K., Lawyer, K., Negassi, Y., Raymond, M., & Woodworth, J. L. (2013). *National charter school study*. Center for Research on Education Outcomes; Betts, J. R., & Tang, Y. E. (2019). The effect of charter schools on student achievement. Routledge; Foreman, L. M. (2017). [Educational attainment effects of public and private school choice](#). *Journal of School Choice*, 11(4), 642-654; Zimmer, R., Buddin, R., Smith, S. A., & Duffy, D. (2019). [Nearly three decades into the charter school movement, what has research told us about charter schools?](#) (EdWorkingPaper No. 19-156). Annenberg Institute at Brown University; Deming, D. J., Hastings, J. S., Kane, T. J., & Staiger, D. O. (2014). [School choice, school quality, and postsecondary attainment](#). *American Economic Review*, 104(3), 991-1013; Sass, T. R., Zimmer, R. W., Gill, B. P., & Booker, T. K. (2016). [Charter high schools' effects on long-term attainment and earnings](#). *Journal of Policy Analysis and Management*, 35(3), 683-706; Dobbie, W., & Fryer Jr, R. G. (2015). [The medium-term impacts of high-achieving charter schools](#). *Journal of Political Economy*, 123(5), 985-1037.
- 12 Mahnken, K. (2023). [National study of 1.8 million charter students shows charter pupils outperform peers at traditional public school](#); Center for Research on Education Outcomes (2015). [Urban charter school study](#). Center for Research on Education Outcomes.
- 13 Raymond, M. E., Woodworth, J. L., Lee, W. F., & Bachofer, S. (2023, June). [As a matter of fact: The National Charter School Study III 2023](#). Center for Research on Education Outcomes.
- 14 Griffith, D. (2022). [Still rising: Charter school enrollment and student achievement at the metropolitan level](#). Fordham Institute; Chen, F., & Harris, D. N. (2022). [How do charter schools affect system-level test scores and graduation rates? A national analysis](#). National Center for Research on Education Access and Choice.
- 15 Cohodes, S. R. & Parham, K. S. (2021). [Charter schools' effectiveness, mechanisms, and competitive influence](#). (NBER Working Paper No. 28477); Griffith, D. (2022). [Still rising: Charter school enrollment and student achievement at the metropolitan level](#). Fordham Institute.

- 16 DeAngelis, C.A., Wolf, P.J., Maloney, L.D., May, J.F. (2020). [Charter School Funding: Inequity Surges in the Cities](#). School Choice Demonstration Project, University of Arkansas.
- 17 We describe our methods in greater depth and provide links to our sources in Appendix A.
- 18 To examine the disparity with debt revenue included, see Appendix A. We exclude debt from all other overall and city-level figures for 2019-20. Figures that include data from past reports (2002-03, 2006-07, 2010-11, 2013-14, 2015-16, or 2017-18) may include some debt.
- 19 Our team's past reports have excluded some of the cities included in the present analysis and included cities not included in the present analysis. The disparities in Figure 3 are based on only the cities included in the present analysis. We studied 11 of those cities in 2002-03, 12 in 2006-07, 14 in 2010-11, 2013-14, and 2015-16, and all 18 cities in 2017-18. See Appendix B for city-specific longitudinal data.
- 20 In Atlanta, almost half of the charter school population attends Georgia Cyber Academy. When we examine only students attending a brick-and-mortar charter school, the disparity, though still one of the largest in our analysis, decreases to about 36 percent.
- 21 The unit of analysis in this regression is each sector in each city (both the TPS and charter sectors in 17 cities and the charter sector only in New Orleans), since we do not have access to school-level data for most of the 18 cities. We build the following regression model sequentially (beginning with only a binary indicator for whether a school is a charter, then adding other demographic characteristics) where  $\gamma_s$  represents state fixed effects for sector  $s$  in city  $c$ :
- 22 We also used accounting approaches to determine the extent to which special education drives the gap. For 14 of our cities (excluding Atlanta, Chicago, New Orleans, and Oakland because of lack of expenditure data), we subtracted all special education expenditures from overall expenditures and special education enrollment from overall enrollment for both the TPS and charter sectors. We found that the remaining disparities in per-pupil expenditures for TPS and charter schools were about 41 percent of the size of the overall disparity, suggesting special education funding explains nearly 60 percent of the disparity.
- 23 The individual dollar amounts in each public revenue category in Table 4 are rounded to the nearest dollar and thus, when the local, state, federal, and unknown public amounts are added, they are equal to \$23,250 per pupil for TPS and \$15,540 per pupil for charter schools, off from Figure 6 by one dollar.
- 24 Although the District of Columbia is not a state, we consider school funding from the district to be state funding for the purposes of this analysis.
- 25 Johnson, A. H., McGee, J. B., Wolf, P. J., Maloney, L. D., & May, J. F. (2023). [Charter school funding disparities: Los Angeles, California](#). School Choice Demonstration Project, University of Arkansas.
- 26 <https://gosa.georgia.gov/dashboards-data-report-card/downloadable-data>
- 27 <https://www.doe.mass.edu/infoservices/reports/enroll/default.html?yr=1920>; <https://www.bostonpublicschools.org/cms/lib/MA01906464/Centricity/Domain/175/District%20Map%20SY23-24.pdf>; <https://www.bostonpublicschools.org/Page/628>; <https://profiles.doe.mass.edu/profiles/student.aspx?orgcode=00350000&orgtypecode=5&fycode=2020>
- 28 <https://www.doe.mass.edu/finance/accounting/eoy/>
- 29 <https://www.nj.gov/education/doedata/enr/index.shtml>; <https://www.nj.gov/education/specialed/monitor/ideapublicdata/index.shtml>
- 30 <https://www.isbe.net/ilreportcarddata>
- 31 <https://www.cps.edu/about/district-data/demographics/>
- 32 <https://www.isbe.net/Pages/School-Finance-Historical-Reports.aspx>;
- 33 <https://cerberus.isbe.net/file/d/Charter%20School%20Audits/>
- 34 <https://www.cde.state.co.us/cdereval/2019-2020pupilmembership>

- 35 <https://financialservices.dpsk12.org/financialtransparency/#financial>
- 36 Enrollment: <https://www.mischooldata.org/student-enrollment-counts-report/>; revenue: <https://www.mischooldata.org/financial-data-files/>
- 37 <https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/tsdindex2020.aspx>; <https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/DistrictSearch.aspx>; <https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/ArchivedSchoolAndDistrictDataFiles.aspx>
- 38 <https://www.houstonisd.org/page/111709>
- 39 Enrollment: <https://rptsvr1.tea.texas.gov/adhocrpt/adspr.html>; revenue: <https://tea.texas.gov/finance-and-grants/state-funding/state-funding-reports-and-data/peims-access-database-financial-data-downloads>
- 40 <https://www.in.gov/doe/it/data-center-and-reports/>
- 41 <http://nces.ed.gov/ccd/elsi/>
- 42 <https://www.in.gov/doe/legal/public-records-requests/>
- 43 <https://myschoolinfo.arkansas.gov/Plus/Schools?referredFromSearchResults=False&firstYear=30&lastYear=32>
- 44 <http://www.apscn.org/reports/hld/ytdledger/ytdledger.htm>
- 45 <https://www.cde.ca.gov/ds/ad/filesenr.asp>
- 46 <https://www.cde.ca.gov/ds/fd/fd/>
- 47 <https://www.tn.gov/education/districts/federal-programs-and-oversight/data/data-downloads.html>
- 48 <http://www.scsk12.org/finance/files/2022/FY2022%20Adopted%20Budget%20Book%20with%20page%20numbers%2010.26.2021.pdf>; <http://www.scsk12.org/finance/files/2022/2020%20SCS%20Internal%20School%20Funds%20Audit.pdf>
- 49 [https://comptroller.tn.gov/advanced-search.html#t=advanced&sort=date%20descending&f:division=\[Local%20Government%20Audit\]&f:county=\[Shelby\]](https://comptroller.tn.gov/advanced-search.html#t=advanced&sort=date%20descending&f:division=[Local%20Government%20Audit]&f:county=[Shelby])
- 50 <https://www.louisianabelieves.com/resources/library/student-attributes>; <https://www.louisianabelieves.com/resources/library/special-education-reporting-and-funding>
- 51 <https://www.louisianabelieves.com/resources/library/financial-data>
- 52 These schools are as follows: New York French-American Charter School; The Equity Project Charter School; Heketi Community Charter School; NYC Charter HS-Architecture, Engineering, Construction Industries; Emblaze Academy Charter School; Cardinal McCloskey Community Charter; Bronx Lighthouse Charter School; Brooklyn Rise Charter School; Hyde Leadership Charter School of Brooklyn; Hebrew Language Academy Charter School; Valence College Prep Charter School; Bridge Preparatory Charter School; and Hellenic Classical Charter School-Staten Island.
- 53 <https://data.nysed.gov/downloads.php>
- 54 TPS: <https://stateaid.nysed.gov/st3/st3data.htm>;  
Charter: <https://www.nysed.gov/charter-schools/charter-schools-directory>
- 55 <https://www.cde.ca.gov/ds/ad/downloadabledata.asp#Annual>;  
<https://www.caschooldashboard.org/search?search=oakland%20charter%20high&year=2020&location=oakland>
- 56 <https://www.cde.ca.gov/ds/fd/fd/>
- 57 <https://www.azed.gov/accountability-research/data/>
- 58 <https://sfbudget.ade.az.gov/Budget/EntitySelection.asp>

- 59 <https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/tsdindex2020.aspx>; <https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/DistrictSearch.aspx>; <https://tealprod.tea.state.tx.us/Tea.AskTed.Web/Forms/ArchivedSchoolAndDistrictDataFiles.aspx>
- 60 <https://www.saisd.net/page/dis-school-attendance-maps>
- 61 Enrollment: <https://rptsvr1.tea.texas.gov/adhocrpt/adspr.html>; revenue: <https://tea.texas.gov/finance-and-grants/state-funding/state-funding-reports-and-data/peims-access-database-financial-data-downloads>
- 62 <https://sde.ok.gov/public-records>
- 63 We include St. Coletta Public Charter School as a TPS, since DCPS makes all programming decisions for this special education charter school.
- 64 <https://osse.dc.gov/publication/dc-attendance-report-2019-20-school-year>
- 65 <https://dcpcsb.org/school-profiles>
- 66 <https://home.treasury.gov/about/offices/management/human-resources-and-chief-human-capital-officer/dc-pensions>
- 67 <https://dcrb.dc.gov/service/annual-comprehensive-financial-reports-acfr>
- 68 <https://cfo.dc.gov/page/annual-operating-budget-and-capital-plan>
- 69 Johnson, A. H., McGee, J. B., Wolf, P. J., Maloney, L. D., & May, J. F. (2023). *Charter school funding disparities: Los Angeles, California*. School Choice Demonstration Project, University of Arkansas.
- 70 Special education funding is allocated based on total student enrollment, not special needs student enrollment, so the disparity between TPS and charter school funding in LA or Oakland cannot be related to differences between the TPS and charter school sectors in special education enrollment. Additionally, foster care enrollment is so low that it should not be driving any funding disparities.
- 71 San Antonio TPS also had access to bond proceeds that Houston TPS did not, but these are not included in our analysis.