

RESEARCH REPORT

Student Transportation and Educational Access

How Students Get to School in Denver, Detroit, New Orleans, New York City, and Washington, DC

Urban Institute Student Transportation Working Group February 2017





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Acknowledgments

This report was funded by the Walton Family Foundation. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the author and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at www.urban.org/support.

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IV ACKNOWLEDGMENTS

Executive Summary

Urban education systems around the country are implementing school choice policies aimed at expanding low-income students' access to high-quality schools. But for too many students, the promise of choice is an empty one because they cannot physically access the school via school- or parent-provided transportation. Thirty-three percent of low-income parents in Denver, Colorado, and Washington, DC, indicated that they would send their child farther from home to attend a better school if transportation were provided (Teske, Fitzpatrick, and O'Brien 2009).

Despite the broad attention that school choice policies have garnered, issues of student transportation within choice-rich cities have not received much attention from policymakers. The student transportation policy decisions cities make can have a substantial impact on school district funding, student health and safety, and student access to different schools (including schools of choice), as well as after-school programs.

In this report, we review the limited available research on student transportation and profile five choice-rich cities: Denver, Colorado; Detroit, Michigan; New Orleans, Louisiana; New York City; and Washington, DC. These cities vary widely in the availability of publicly funded transportation for students, especially for students who opt out of their neighborhood school. Type of school, student's age, and city infrastructure are among the factors that contribute to the available transportation options in a given city.

We conclude by laying out a set of critical questions that must be answered if student transportation is to be an enabler of, rather than a barrier to, equitable access to high-quality education in urban areas. These include better understanding how students currently get to school and how those patterns might be affected by policy choices, such as changes in transportation eligibility or transportation modes available and other innovations designed to increase equity of access to high-quality schools.

EXECUTIVE SUMMARY V

Understanding Student Transportation in Choice-Rich Cities

Issues of student transportation have long played a significant, and sometimes controversial, role in facilitating US education policy. In the late 19th and early 20th centuries, student transportation enabled the consolidation of rural school districts, moving students from one-room school houses to larger, more professionalized schools (Killeen and Sipple 2000). In the 1970s, "busing" became synonymous with court-ordered desegregation of schools in cities across the country. Changes in student transportation may facilitate (or hinder) changes in schooling options, thereby changing the quality and character of education that a student is able to receive.

In recent years, more cities have adopted policies that allow students to select schools outside of their neighborhood catchment zone (Wohlstetter, Zeehandelaar, and Griffith 2015). The number of students attending charter schools has also increased, demonstrating that more students may be opting for other public schools beyond their traditional neighborhood school. Student transportation policy can promote equitable access to schools across a given city, but it can also reduce access, limiting options for families who do not have the funds or available time to transport their children to school.

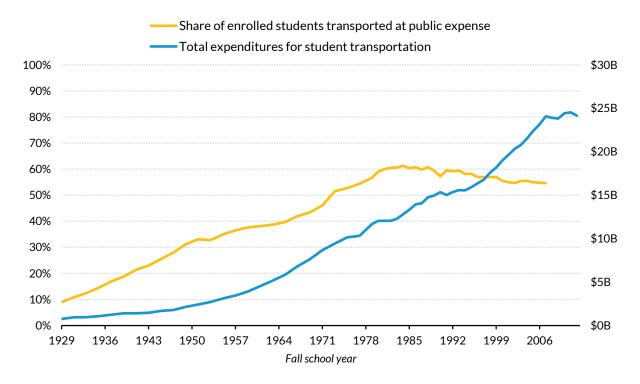
Why Student Transportation Policy Matters

Student transportation comes at considerable public cost and can absorb a surprising amount of a school district's or city's budget. These costs are covered by a mix of federal, state, and local funds and thus reflect policy decisions at multiple levels. Student transportation may also affect a student's health and well-being. Issues of safety and health while traveling to school can have an impact on a student's attendance and her overall academic performance. Finally, student transportation can have a substantial effect on the quality of a student's education and the composition of her peer group. Transportation options can enable students to attend higher-quality schools that might have been previously inaccessible, and they can allow for participation in enriching before- and after-school activities.

Cost of Student Transportation

School districts spent about \$23 billion on student transportation in the 2012–13 school year, which amounts to roughly 4 percent of all current expenditures for public education.² About half of America's students take publicly funded transportation to school, at an average cost of \$914 dollars per year per transported student.³ The share of students who use district-provided transportation has slowly declined from its peak of 61 percent in 1983, yet the inflation-adjusted per pupil cost of transportation has generally increased over time (figure 1).

FIGURE 1
Share of Students Transported at Public Expense, Total Expenditures
From 1929–30 to 2012–13



Source: Digest of Education Statistics 2016, table 236.90.

Notes: The percentage of students transported at public expense is unavailable after the 2007–08 school year. Expenditures per transported student are adjusted to 2014–15 school year dollars using the Consumer Price Index.

The cost of transporting students is paid out of federal, state, and local funds. Federal public transit funds cannot be used exclusively for student transportation, but local transit agencies can use part of their federal funding to expand service on an existing route for the benefit of students; and most states provide districts with funding designated for student transportation (Merrill 1990; Vincent et al. 2014).

The amount of state assistance varies widely. For example, New Hampshire provides minimal aid (only for career and technical education and alternative education), but South Carolina provides all funding for students' yellow bus transportation.

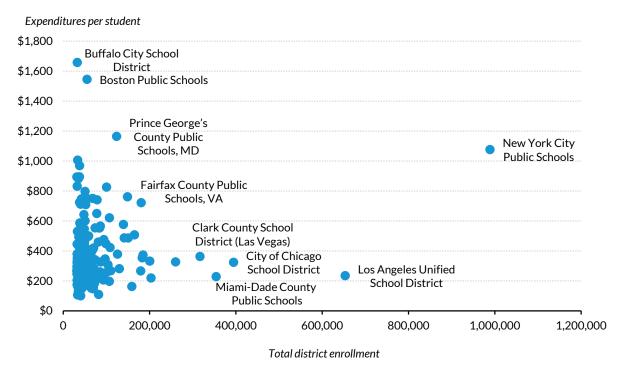
School districts also differ in how much they spend per pupil on transportation, though costs tend to be correlated with the size and density of the district (McDonald et al. 2015). In the 2013–14 school year, districts with fewer than 3,000 students spent an average of \$129 per enrolled student, while districts with more than 50,000 students spent an average of $$53.^4$

Among the two hundred largest school districts in the United States (by enrollment), there are substantial differences in transportation spending relative to overall enrollment (figure 2). This variation is likely driven by a number of factors, such as the size and density of the city, number of students eligible for district-provided transportation (e.g., by age and proximity to school), state requirements for student transportation, the availability and cost of public transportation infrastructure, and the cost of living within the given district.

Changes in district-level transportation policies can have substantial effects on the budgets of both school districts and local transit agencies. For example, from 2009 to 2012, Minneapolis Public Schools implemented a pilot program, Student Pass, which allowed high school students to take unlimited rides on regular-route buses and light rail during the school year. A study of this pilot estimated that it saved the schools \$1.55 million in continuing bus-service costs and reduced traffic congestion by saving an estimated 2.2 million vehicle miles traveled by yellow buses and personal vehicles (Fan and Das 2015). Yet, there are often trade-offs when such initiatives are put in place.

For example, a 2014 study of the costs and benefits of providing all Los Angeles County students with free transit passes highlights the potential trade-off between the budgets of a school district and a local transit agency. That study estimated that providing transit passes to students could decrease transit fare revenue by \$24 to \$71 million, but that this decrease in transit revenue would be offset by substantial savings in school district transportation costs, which totaled \$273 million in the 2011–12 school year (Gase et al. 2014).

FIGURE 2
School District Transportation Expenditures per Enrolled Student, by Enrollment Size
For 2013–14 school year, 200 largest school districts by enrollment



Source: National Center for Education Statistics, Common Core of Data, fiscal year 2013.

Notes: Expenditures are in 2013–14 dollars.

Transportation costs can also be driven by changes in policy on the provision of transportation for students with special needs, which are governed by federal law as well as state and local policy. One study found that transportation for students with disabilities increased 80 percent in constant dollars from the 1985–86 to the 1999–2000 school years, while costs for students without special needs only rose 20 percent (Chambers, Parrish, and Lam 2002). It is estimated that special education transportation costs ranged from \$4,000 to \$6,000 per student in the 2010 fiscal year, while the costs for regular education transportation ranged from \$200 to \$400 (Bittel and Young 2012).

When school districts face structural changes, such as school consolidation or an increase in the use of school choice programs, district-provided transportation becomes increasingly challenging and complex. In rural districts, the consolidation of schools can lead to longer bus-ride times and increased district costs (Killeen and Sipple 2000). Studies of Minnesota students in districts with school choice found that those not attending their neighborhood school were less likely to walk or bike to school and

more likely to rely on bus service or automobile transportation in areas without school bus service, which could lead to increased system costs (Wilson, Wilson, and Krizek 2007; Wilson et al. 2010).

School choice policies can have a substantial impact on a district's bottom line, depending on whether and how they provide publicly funded school transportation. Each state has its own policy on whether charter school students must be provided bus service by the local public school district. For example, Boston Public Schools spent \$12 million providing bus services for charter students in the 2016 fiscal year, which amounts to 11 percent of the transportation budget to transport 14 percent of all Boston resident students attending a public school (Boston Municipal Research Bureau 2016).

Implications for Children's Health and Safety

The relationship of student transportation to students' health and safety is a critical intersection for researchers, students, and parents. Issues of health and safety often arise from the trade-off between walking or biking to school (sometimes called active commuting), compared with using bus or private automobile transportation. One study estimated that 41 percent of students walked or biked to school in 1969, but just 13 percent did so in 2001 (McDonald 2007).

The federal Safe Routes to School Program, authorized in 2005, encourages walking and biking to school, and there have been modest increases in the use of these transportation modes in recent years. National survey data from the National Center for Safe Routes to School indicates that the percentage of students who walked to school rose substantially between 2007 and 2012—from 12.4 percent to 15.7 percent before school and from 15.8 percent to 19.7 percent after school, with a greater increase for students who attended low-income schools (National Center for Safe Routes to School 2013).

Students who are active commuters tend to accumulate slightly more moderate to vigorous physical activity compared with students who are not active commuters; however, these active commuters generally do not have a body-mass index that is statistically different from their nonactive peers (Sirard and Slater 2008). There is evidence that exposure to diesel exhaust, produced by the majority of school buses, is linked to an increase in the risk of lung cancer and asthma (Balmes 2011; Weir 2002).

Despite this risk, school buses generally have a strong safety record—school buses account for 25 percent of trips for school-age children during normal school travel hours and just 2 percent of deaths and 4 percent of injuries that occur from crashes during the same hours (Committee on School Transportation Safety 2002). In addition, though any amount of bullying is concerning, middle and high

school students reported that bullying mostly occurs in the classroom (34 percent) or in hallways (46 percent) and less so on school buses (8 percent) (Zhang, Musu-Gillette, and Oudekerk 2016).

The relative risk of each mode of transportation is highly dependent on the context of the community surrounding the school. For example, the physical characteristics of an urban area, such as the real or perceived safety of the neighborhood or traffic, can affect a student's travel mode to school (McMillian 2005). Nationally, the percentage of students who report being afraid of attack or harm at school or on the way to and from school decreased from 12 percent in 1995 to 3 percent in 2013 (Robers et al. 2015).

But students who are black or Hispanic, or who live in urban areas, tend to report higher rates of fear than their white or suburban counterparts (Robers et al. 2015). A study of fifth-graders in low-income Los Angeles neighborhoods found that 41 percent perceived walking to school as safe and 54 percent perceived it as unsafe (Banerjee, Uhm, and Bahl 2014). Students may perceive risk differently than parents. For the surveyed students in Los Angeles, the decision on whether and where to walk was centered more on the presence of social dangers, such as gang-related activities and the risk of witnessing or being a victim of crime, than traffic-related dangers, whereas parents tended to perceive traffic-related risks as the larger barrier to walking (Banerjee, Uhm, and Bahl 2014).

School choice policies could potentially affect health and safety through altering a student's mode of transportation to school, but direct evidence for this hypothesis is thin. A study of a mid-sized school district in Eugene, Oregon, showed that students attending schools other than their default neighborhood school were more likely to be driven to school and less likely to walk or bike to school (Yang, Abbott, and Schlossberg 2012). A study of a 2010 Minneapolis policy that restricted school choice to three regional zones found that, though average distance to school decreased, no significant change was observed in the percentage of students walking or biking or in the number of automobiles dropping off students at school (Sirard et al. 2015).

Academic Performance and Access to High-Quality Schools

Student transportation can have either positive or negative impacts on students' academic performance and access to high-quality schools. The logistics of travel to and from school influence a student's ability to get to school on time, her number of absences, and her availability to participate in before- or after-school activities (Blackmon and Cain 2015; Canfield et al. 2016; Grossman, Walker, and Raley 2001; Teasley 2004). Factors such as inclement weather, traffic, irregular public transit

schedules, out-of-pocket costs, or a change in a student's home location all interact with transportation choices to affect where students go to school and the amount of time they spend there.

Though school transportation can introduce logistical challenges, publicly provided student transportation could enable access to a wider variety of high-quality schools. Transportation can give students access to specialized programs or schools (e.g., bilingual programs and magnet schools) and can allow families to cast a wider net for schools outside their neighborhood school, including schools that enroll a more diverse student body. For students with disabilities, transportation allows access to programs that best support their needs.

Transportation policies can have indirect effects on students through the limitations they often place on school start times. A later school start time, especially for older students, has been shown to have a substantial positive impact on academic achievement (Carrell, Maghakian, and West 2011; Wolfson et al. 2007). However, a change in school start times is typically accompanied by a change in student transportation schedules and policies, which can come with significant costs. When districts vary start times to allow for reuse of buses, high schoolers are typically assigned the earliest start time. Inverting a district's bus schedule to give older students a later start time is one relatively low-cost solution (Wahistrom 2002). But other types of transportation changes, particularly in bus schedules, may be accompanied by an increase in costs (Edwards 2012; Jacob and Rockoff 2011).

There is some evidence that the competitive effects of spatial proximity to multiple schools could generate increases in academic performance across all schools (Egalite 2013; Millimet and Collier 2008). A study of Florida's tax credit scholarship program found that public schools that were exposed to competitive pressure from nearby private schools because of the introduction of the scholarship produced higher test scores compared with schools that did not have nearby private schools (Figlio and Hart 2014). It is conceivable that lowering transportation barriers to allow access to more distant schools would produce a similar competitive effect, but this effect has not been directly studied.

The availability of information on academic quality can interact with school proximity—spatial or temporal—to influence access to and enrollment in high-quality schools. When parents in the Charlotte-Mecklenburg Public School District were provided with information on school-level test scores, proximity to a high-scoring school was a key predictor for choosing an alternative school (Hastings and Weinstein 2008). A study of school lottery choices in Washington, DC, estimated that a typical middle school parent would be willing to travel an additional 1.2 miles for a 10-point increase in the rate of "proficient" test scores (Glazerman and Dotter 2016).

In surveys, parents indicate that they factor student transportation into their decisions on where to send their children to school. A survey of parents in eight cities found that the percentage of parents who reported finding transportation to and from school as a problem ranged from 19 to 32 percent, depending on the city. In many of the surveyed cities, parents with less formal education (high school diploma or less) were more likely to report difficulty with transportation than parents with more formal education (bachelor's degree or higher) (Jochim et al. 2014).

Issues of race, ethnicity, and class also interact with trade-offs between school quality and transportation. An analysis of students entering high school in Chicago showed that students from affluent neighborhoods were more likely to attend school close to home, but students from low-income neighborhoods were more likely to travel farther and were 35 percent more likely to be the only student from their neighborhood at a given school (Burdick-Will 2015). In Denver, black families were more likely to apply to a distant, high-quality school than Hispanic or white families (Denice and Gross 2016).

Understanding Five Choice-Rich Cities

To further explore how issues of student transportation affect school districts, we chose five choicerich cities as case studies: Denver, Colorado; Detroit, Michigan; New Orleans, Louisiana; New York City; and Washington, DC. Each of these five cities have evolved different approaches toward delivering student transportation. We profile each of these cities, outlining similarities and differences in their current policies and highlighting innovative initiatives currently under way to improve student transportation.

These cities share a robust set of school choice options, but they vary substantially in their population density, public transportation infrastructure, and demographics (table 1). In addition, each city operates within its own policy context, under different state requirements for student transportation and different policies for the regulation and management of schools of choice (the appendix provides detailed policy information for each city).

TABLE 1

Descriptive Data on Five Choice-Rich School Districts

	Denver, CO	Detroit, MI	New Orleans, LA	New York, NY	Washington, DC
Geographic size ^a	,			,	-
(square miles)	153	139	169	303	61
Total population ^b	682,545	677,257	389,617	8,550,405	672,228
Population density					
(people per square					
mile)	4,461	4,872	2,305	28,219	11,020
Demographics ^b					
White	54%	10%	31%	32%	36%
Black	9%	79%	58%	22%	47%
Hispanic/Latino	31%	8%	6%	29%	11%
Asian	3%	1%	3%	14%	4%
Other/two or more	3%	2%	2%	3%	3%
Ages 5 to 19	16%	21%	17%	17%	14%
Median HH income ^c	\$ 53,637	\$ 25,757	\$ 36,792	\$ 53,373	\$ 70,848
Below					
\$15,000/year ^c	14%	32%	24%	17%	14%
Living in same					
residence last year ^c	78%	84%	83%	89%	80%
Enrollment by type ^d					
Public	75%	57%	5%	78%	48%
Charter	14%	40%	68%	7%	36%
Private	11%	3%	26%	15%	16%
Commute to work ^c					
Drive alone/carpool	79%	82%	79%	27%	39%
Public transit	7%	9%	8%	57%	38%
Walked	5%	4%	5%	10%	13%
Other/work at home	10%	5%	8%	7%	10%
Average time					
(minutes)	25	27	23	40	30

Source: Sources are detailed in the lettered notes.

Notes: Demographics are by city school district boundaries (Denver County School District 1, Detroit City School District, Orleans Parish School District, New York City Department of Education, and District of Columbia Public Schools). HH = households.

^a 2015–16 school district boundaries.

^b 2015 American Community Survey (ACS) one-year estimates.

 $^{^{\}rm c}$ 2011–15 ACS five-year estimates.

^d National Center for Education Statistics 2011–12 Private School Universe Survey, 2014–15 Common Core of Data.

Transportation Infrastructure and Policy

Within each of our five cities, the availability of public transit, and mode of public transit, varies widely (table 2). New York City and Washington, DC, have comparatively robust public transportation systems, with heavily used bus and heavy rail (subway) systems. The Denver-Aurora area has a bus system, as well as a relatively extensive light rail network. Detroit and New Orleans both have bus networks, as well as small rail systems, primarily in the downtown areas (Detroit's People Mover monorail and New Orleans' street car system).

TABLE 2

Public Transportation Options, by City

Passenger miles traveled in 2014

		Passenger Miles (Thousands)					
		_		Light rail/ monorail/	_		
	Population	Bus	Heavy rail	street car	Ferry		
Denver-Aurora, CO	2,374,203	387,702		199,703			
Detroit, MI	3,734,090	187,556		3,300			
New Orleans, LA	899,703	45,304		13,945	1,321		
New York-Newark, NY-NJ-CT	18,351,295	3,482,778	11,554,714	58,316	131,876		
Washington, DC-VA-MD	4,586,770	661,296	1,519,705				

Source: American Public Transportation Association, 2016 Public Transportation Fact Book (Washington, DC: American Public Transportation Association: 2016), appendix B, http://www.apta.com/resources/statistics/Pages/transitstats.aspx. **Notes:** Population and passenger miles are available by public transportation regions, not school district.

Each city has a unique system for student transportation, partially influenced by the local availability of public transportation. For example, nearly all students in New Orleans who live more than a mile from school are eligible for yellow school bus transportation. In contrast, very few students in Washington, DC, have yellow school bus transportation and are instead provided fare cards for use on public bus and Metro lines. In Denver, Detroit, and New York City, yellow bus transportation is allocated by grade. Younger students are eligible for school-provided transportation, and older students are given passes to use on public transportation (table 3).

TABLE 3

Available Transportation for Eligible Students

City	Mode	Student access				
	Yellow bus	Grades K–8 and students with special needs				
Denver, CO	reliow bus	Grades 9–12 in a Success Express neighborhood				
	Public transit	Grades 9–12 outside a Success Express neighborhood				
	Yellow bus	Grades K–8 and students with special needs				
Detroit, MI	reliow bus	Grades 9–12 who attend an EAA school				
•	Public transit	Grades 9–12 who attend a DPS school				
N 0 1 1 1 1	Yellow bus	Grades K–12 enrolled in OPSB or Type 5 RSD charter schools				
New Orleans, LA	Public transit	N/A				
	Yellow bus	Grades K–6 and students with special needs				
New York, NY	Public transit	Grades K–6 not served by yellow bus route				
,	Public transit	Grades 7–12				
	Yellow bus	Students with special needs				
Washington, DC	Public transit	Grades K–12				

Source: Urban Institute analysis of district transportation policies.

Notes: This is a broad summary of student transportation policy in these cities. See the appendix for full policy descriptions. For Denver, yellow bus includes both standard routes and Success Express routes. The Education Achievement Authority is Michigan's state-run school district. A Type 5 charter school is a school chartered through the Recovery School District, Louisiana's state-run school district. DPS = Detroit Public Schools; EAA = Education Achievement Authority; OPSB = Orleans Parish School Board; RSD = Recovery School District.

Among cities that stagger eligibility for transportation by age, there is substantial variation in how far students need to live from their school to be eligible for transportation services (table 4). Denver Public Schools provide transportation only for students who live a considerable distance from their neighborhood school. For example, students in Denver middle schools are eligible for yellow bus transportation if they live more than 2.5 miles (walking distance) from their school, a distance that is farther than high schoolers are required to live to access a transit benefit in the four other cities. In contrast, there is no distance limit for Washington, DC, students to access the Kids Ride Free transportation benefit.

TABLE 4
Minimum Eligible Distance from School for Yellow Bus Transit or Full-Fare Public Transportation

		Grade												
City	PK	K	1	2	3	4	5	6	7	8	9	10	11	12
Denver, CO	None		1 mi.						2.5 mi.			3.5 mi.		
Detroit, MI	None		0.75 mi.							1.5 mi.	or 2 mi.	a		
New Orleans, LA	0 mi.		1 mi.											
New York, NY	Noneb	0.5 mi. 1 mi. 1.5 mi.												
Washington, DC			0 mi.											

Source: Urban Institute analysis of district transportation policies.

Notes: New York offers half-fare public transportation to some students who live closer to school (see the appendix). Though Washington, DC, does not explicitly have a prekindergarten fare benefit, children under the age of 5 ride free. Districts may use different software or measurement techniques to determine distance between a student's home and school. PK = prekindergarten.

Within each city, eligibility for assistance with transportation also varies by the type of school that the student attends (table 5). In Denver, assistance is only available for students attending their neighborhood school, or a different school if their school is identified as low performing. Similarly, in Detroit, transportation is only available for neighborhood schools, schools in the state-run Education Achievement Authority district, and magnet high schools. Students who attend a charter school, or who enroll in a neighboring district through Michigan's Schools of Choice program, receive transportation at the discretion of their school or provider.

In New Orleans, transportation is provided for all public schools and for many city charter schools, orchestrated by the individual local education agencies (LEAs) or schools. New York City provides transportation to district public schools and to charter schools within the same borough in which the student resides. It also provides within-borough transportation to some nonpublic schools (New York City Independent Budget Office 2000). Washington, DC, provides free bus and rail passes to all traditional and charter school students, and it provides bus passes to private school students.

^a Detroit Public Schools offers a fare benefit for high school students who live more than two miles from school and are eligible for free and reduced-price lunch.

^b Some New York City prekindergarten programs may offer yellow bus service.

TABLE 5
Likelihood of Public Student Transportation Assistance by School Attended

	Traditional neighborhood school	Traditional nonneighborhood school	Charter school	Private school	Other districts
Denver, CO	All	Few	Some	None	None
Detroit, MI	All	Few	Some	None	Some
New Orleans, LA	All	All	Most	None	None
New York, NY	All	Some	Most	Some	None
Washington, DC	All	All	All	Most	None

Source: Urban Institute analysis of district transportation policy.

Notes: Transportation for charter schools in Denver and Detroit is provided at discretion of the school. Transportation for other district schools neighboring Detroit is provided at the discretion of the district. This table excludes assistance for students with special needs.

Transportation and Choice

We have shown that families in these choice-rich cities who opt out of their neighborhood school also opt into a more complex set of transportation options, which they may have difficulty navigating. Surveys of parents in these cities show that distance to school and availability of transportation are substantial factors in choosing a school.

The Center on Reinventing Public Education recently conducted a survey of parents in eight cities, including Denver, Detroit, New Orleans, and Washington, DC. Nineteen percent of parents in New Orleans and 21 percent of parents in Washington, DC, identified school transportation for their children as a barrier to choosing a school. In Denver and Detroit, where student transportation to nonneighborhood or charter schools is less likely, 29 percent of parents identify transportation as a problem (Jochim et al. 2014).

Each of these cities has a guide for locating a student's neighborhood school and available schools of choice (table 6). In Denver, New Orleans, and New York City, the city's public school districts (Denver Public Schools, Orleans Parish School Board and Recovery School District, and New York Department of Education) provide information on both public and charter schools in the city. In Detroit, the comprehensive list of options is managed by a nonprofit provider. Washington, DC's school finder is overseen by the Office of the Deputy Mayor for Education.

Availability of transportation information in these guides varies widely. Some sites prioritize a map view, showing how far each school is from a student's home, and other sites also offer the option to sort

by distance. The New York and Washington, DC, guides offer clear information listing nearby public bus and subway routes. In addition, the New York Department of Education's School Search provides some information on available yellow bus routes for a given school.

TABLE 6

Comprehensive School Choice Guide Transportation Information

	Denver, CO	Detroit, MI	New Orleans, LA	New York, NY	Washington, DC
		Excellent			My School DC
Provider	SchoolChoice	Schools Detroit	EnrollNOLA	School Search	School Finder
Format	Website	Website	Website	Website/print	Website
Sort choices by					
distance	Yes			Yes	Yes
Map of school					
location	Yes	Yes	Yes	Yes	Yes
Google directions	Yes	Yes	Yes	Yes	Yes
Indicator of					
transportation	Yes	Yes	Yes	Yes	Yes
Public transit information		When available		Yes	Yes
Public transit route information				Yes	Yes
Yellow bus					
information	Yes	When available		Yes	
Yellow bus route information				Yes	

Source: Urban Institute analysis of school choice resources as of October 2016.

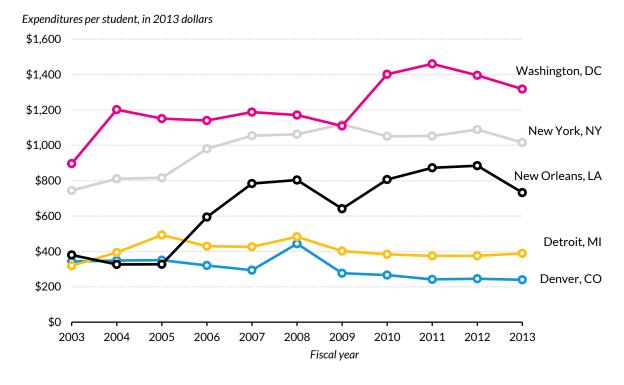
Current Spending on Transportation

With each distinct approach to transportation, LEA-generated student transportation costs in each city vary widely. Figure 3 shows the total transportation costs, as reported by public and charter school LEAs, per total enrolled students in each of the five cities. Spending, in 2013 inflation-adjusted dollars, has stayed relatively steady in Denver and Detroit, but spending in the other cities has generally risen over time. Spending on transportation per student increased substantially in New Orleans after Hurricane Katrina, where school choice increased the distance that students travel to school (Cowen Institute for Public Education Initiatives 2013).

In Washington, DC, where the majority of transportation spending is for students enrolled in special education programs, costs per student have risen over time, which may in part be driven by

compliance with the requirements of *Petties v. District of Columbia*, which placed DC's special education bus service under federal court supervision for much of 2002 to 2013 (Parrish et al. 2007).⁸ In New York City, some have attributed rising costs to rising contract costs as well as an increase in students opting for choice schools.⁹

FIGURE 3
School District Transportation Expenditures per Enrolled Student
From the 2002–03 to 2012–13 school years



Source: National Center for Education Statistics, Common Core of Data.

Notes: Expenditures per pupil are calculated for all local education agency, public and charter, within each city. Expenditures for Highland Park School District and Hamtramck Public Schools are included in the Detroit calculation. Expenditures per pupil are also calculated as the total reported current expenditures on student transportation divided by total fall enrollment. Transportation spending for Washington, DC, in fiscal years 2009 and 2010 is imputed with supplementing budget documents from the DC State Advisory Panel on Special Education.

Of course, LEA spending on student transportation is just part of the story on student transportation spending. When students are provided subsidized fares on public transportation, costs are often shared between state and local governments as well as the transportation agency. ¹⁰ These costs are often not included in LEA reports of student transportation expenditures.

Innovations in Student Transportation

In each of these cities, new initiatives and pilot projects have taken root to help increase students' access to schools. These initiatives focus on increasing safety for active commuters to school, facilitating participation in after-school activities, and developing better data to understand student transportation patterns.

In each of these cities, a substantial number of students may still walk or bike to school. Denver, New York City, and Washington, DC, participate in the Vision Zero Network, a group of cities that have committed to making changes to reduce traffic deaths and injuries (New Orleans is considering joining). These include lowering speed limits, redesigning streets, and creating behavior change through communications campaigns. ¹¹

All five cities participate in the Safe Routes to School programs, which promotes safe walking and biking to and from schools. This program promotes safety through such initiatives as increased signage, removal of barriers to walking and bicycling, safety communication and training, and projects such as "walking school buses." In addition, Denver and Washington, DC, have been focus cities within the Green Lane Project, which supports cities in becoming national leaders in the installation of protected bike lanes. District of Columbia Public Schools has also undertaken an initiative to ensure that all second graders in their schools learn to ride a bike.

Denver Public Schools introduced a bus shuttle service, the "Success Express," to promote attendance and allow for participation in before- and after-school activities in the more isolated Far Northeast and Near Northeast sections of the city. The buses, which are staffed by both a driver and a paraprofessional, circulate through neighborhoods from 6:30 to 9:30 a.m. and from 2:30 to 6:30 p.m., giving students three opportunities before and after school to take the bus. These pilots have prompted the development of other zoned bus routes throughout the district in the 2015–16 school year. This initiative, along with other reform initiatives, has been associated with improvements in attendance and decreased truancy (Ely and Teske 2014).

In 2013, the Skillman Foundation funded a pilot program called the Detroit Youth Transit Alliance, which provided rides to and from school and after-school programs for students in southwest Detroit. Funding for the project continues through the Ride for Ride program run by the alliance's provider, the Detroit Bus Company. ¹³

In some cities, new technology streamlines access to transit and provides insight into how and when students are using transportation services. Denver gives students an RFID card known as a +Pass,

which they use to tap into and out of yellow school buses. The +Pass system allows Denver Public School officials and parents to keep track of students and provides valuable long-term information on when students use the bus and the length of time it takes them to travel to school. ¹⁴ In Washington, DC, students' bus and Metro fares are paid through their DC One Card, which also allows access to Department of Parks and Recreation programs and functions as a library card. Washington, DC, recently expanded the hours of the program, allowing free transit to school or school-related activities all day, including weekends. ¹⁵

Better Understanding Student Transportation

Transportation matters for students everywhere, but it is especially important in choice-rich cities that are working to break the link between where students live and where they go to school. Our five case studies make clear that each city has evolved its own policies and systems for allowing students to access nonneighborhood schools. But researchers, policymakers, and practitioners still know far too little about how these systems function in practice.

Specific areas for future inquiry in these and other choice-rich cities include the following:

- Understanding current use: How far do students travel to go to school, how do they get there, and how long does it take them? What are trade-offs of different transportation modes (walking or biking, public transit, or private automobile), and how many students use transportation provided directly by their school district?
- Understanding potential use: How do current student transportation infrastructures affect
 access to high-quality schools? What implications do transportation infrastructure and policy
 have for equity of access to high-quality schools?
- Simulating effects of policy changes: How can pilot projects and initiatives in student transportation make access to high-quality schools more equitable? For example, what are the potential benefits and costs to students of specific changes to a city's public transit system or yellow bus transportation services? How can other decisions, such as school siting policies or the location of affordable housing, work in tandem with student transportation initiatives?

Obtaining answers to these challenging questions is a necessary first step toward ensuring that transportation is an effective tool for educational equity rather than a barrier that dulls the impact of reform.

Appendix. Student Transportation Policy by City

Denver, Colorado

State Support for Student Transportation

- The state sets minimum standards, such as vehicle condition and features, for school transportation vehicles in traditional public and charter school districts. The minimum standards were last updated in March 2015.
- The state maintains a Transportation Advisory Council (TAC) to facilitate collaboration between the Colorado Department of Education and school district transportation departments. The TAC meets at least four times a year.

Denver Policy

Yellow bus transportation, or Success Express transportation, is provided for the following students:

- Students in kindergarten to grade 5 who live more than 1 mile from their boundary school
- Students in grades 6 to 8 who live more than 2.5 miles from their boundary school
- Students in grades 9 to 12 who live more than 3.5 miles from their boundary school and attend a school on a Success Express bus route
- Students with special needs, as required

Public transportation passes for light rail and bus are provided for students in grades 9 to 12 who live more than 3.5 miles from their boundary school and do not use the Success Express, or who attend a magnet program more than 3.5 miles from their home.

Students who use school choice to enroll in a nonneighborhood school are not eligible for bus services, unless their boundary school is identified as a Priority Improvement or Turnaround school or the parent has secured a transportation exception.

Detroit, Michigan

State Support for Student Transportation

- The state sets minimum standards, such as vehicle condition and features, for school transportation vehicles, through the Pupil Transportation Act of 1990, which was last amended in 2006.
- The state allocates about \$1.7 million in reimbursement funds for the inspection of student transportation and \$3.3 million for bus driver safety instruction, under the current amendments to the State School Aid Act of 1979. The state also reimburses districts for 70.4 percent of the total approved costs of special education transportation, as required by the set of court cases known as *Durant v. State of Michigan*.
- The state maintains a Pupil Transportation Advisory Committee (PTAC) to facilitate collaboration between the Michigan Department of Education and transportation stakeholders. The PTAC meets three times a year.

Detroit Policy

Yellow bus transportation is provided for the following students:

- Students in kindergarten to grade 8 who live more than 0.75 of a mile from their Detroit Public Schools (DPS) neighborhood school or their Education Achievement Authority school, which are part of Michigan's state-run school district
- Students in grades 9 to 12 who live more than 1.5 miles from their Education Achievement
 Authority school; students in grades 9 to 12 who attend a DPS neighborhood school may have
 access to a shuttle from other DPS campuses

Students with special needs, as required

Public transportation passes for bus use are provided for students in grades 9 to 12 who live more than 2 miles from their DPS neighborhood school and meet low-income guidelines for free and reduced-price school lunch eligibility.

Students who use school choice to enroll in a nonneighborhood school are not eligible for bus services. Students who enroll in charter schools in Detroit may have access to yellow bus service. Some neighboring districts who educate Detroit students through the Schools of Choice program provide yellow bus transportation.

New Orleans, Louisiana

State Support for Student Transportation

- The state, through the Louisiana Department of Education, provides training and technical assistance to the transportation supervisors of local school districts as well as to private contractors who serve public schools. Through Bulletin 119, revised in February 2016, Louisiana sets equipment standards for school buses and training standards for drivers.
- The state provides funds for student transportation to LEAs through the Minimum Foundation Program formula to support the minimum cost of education. Districts can apply for High Cost Services grants, which may fund individual student transportation, when the cost of educating the student with an individualized education program exceeds three times the average per student expenditure.
- The Louisiana Board of Elementary and Secondary Education requires Type 5 charter schools (those that were previously public schools, now under the jurisdiction of the Recovery School District) to provide transportation to students living within its attendance zone if the student lives more than a mile from school. Currently, 88.5 percent of state-authorized, nonvirtual charter schools provide student transportation (State Board of Elementary and Secondary Education, n.d.).

New Orleans Policy

Yellow bus transportation is provided for the following students:

- All Orleans Parish School Board (OPSB) public school students in prekindergarten from the nearest safe corner of their home
- OPSB public school students in kindergarten to grade 2 who live more than 1 mile from school (required to have a responsible adult present at the nearest safe corner)
- OPSB public school students in grades 3 to 12 who live more than 1 mile from school are eligible to be picked up at a stop no more than 1 mile from their house
- Students with special needs, as required
- Students enrolled at Type 5 (Recovery School District) charter schools who live more than a mile from school

Students who enroll in non–Type 5 charter schools may have access to yellow bus service or to city bus passes.

New York City, New York

State Support for Student Transportation

- Under Section 3635 of New York's Education Law, city school districts and the city portion of
 enlarged city school districts are not required to provide transportation except for suitable
 transportation for children with handicapping conditions.
- The state has oversight responsibility for school district provision of student transportation services, processes contracts and extensions for private service contracts, and provides training programs for school bus drivers. In 2008–09, the state provided \$1.5 billion of the \$2.8 billion spent on student transportation (Transportation Working Group 2012).
- The state maintains a School Bus Driver Instructor Advisory Committee, which meets three times a year.

New York City Policy

Yellow bus transportation is provided for the following students:

- Students in kindergarten to grade 2 who live more than 0.5 of a mile from their district public school or within the same borough of their charter or nonpublic school
- Students in grades 3 to 6 who live more than 1 mile from their district public school or within the same borough of their charter or nonpublic school
- Students who would be eligible for public transportation passes but receive a variance
- Students with special needs, as required

Public transportation passes for buses are provided for the following students:

- Students in kindergarten to grade 2 who live less than 0.5 of a mile from school are eligible for half-fare passes
- Students in grades 3 to 6 who live between 0.5 to 1 miles from school are eligible for half-fare passes
- Students in grades 7 to 12 who live between 0.5 to 1.5 miles from school are eligible for halffare passes; students in grades 7 to 12 who live more than 1.5 miles from school are eligible for full-fare passes
- Students who are eligible for yellow bus service but do not have it provided through their school are eligible for full-fare passes

Washington, DC

DC Support for Student Transportation

The Office of the State Superintendent Division of Student Transportation (OSSE DOT) provides transportation for eligible special needs students in the DC to both DC and non-DC schools. OSSE oversees transportation equipment and maintenance, generates route maps, and supervises staff.

- OSSE requires that LEAs and schools that participate in student transportation submit a biannual Certification for Student Transportation.
- Students are eligible for free bus and rail passes (Kids Ride Free) through a collaboration between the DC government and the Washington Metropolitan Area Transit Authority.

Washington, DC, Policy

Yellow bus transportation is provided for students with special needs, as required.

Public transportation passes are provided for the following students:

- All students, ages 5 through 21, who are enrolled at a District of Columbia Public School or a DC charter school are eligible for a free \$100 monthly bus and rail pass.
- All students enrolled in private and parochial schools are eligible for a free \$100 monthly bus pass.

Some charter schools opt to provide yellow bus service for students.

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