
RESEARCH REPORT

# Going the Distance

## Understand the Benefits of a Long Commute to School

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*October 2018*

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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 authors 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 urban.org/fundingprinciples.

We would like to thank the transportation and enrollment departments in Denver Public Schools for helping us access the data used in this report and for their thoughtful feedback and review of this analysis.

# Going the Distance

Many school choice advocates assume that if a student chooses a school, no matter how far from home, the benefits outweigh any drawbacks.

But when students opt for far-flung schools, do they always get stronger academic programs, a broader array of school activities, or other benefits? Is it worth it to go the distance?

In this report, we focus on a subgroup of students in Denver, Colorado, whose first-choice schools on their ninth grade applications are far from home. We then consider whether these first choices would give students access to stronger academic outcomes, fewer disciplinary incidents, advanced courses, dual-language programs, or sports or arts programs.

We found that this subgroup of Denver students, if they are accepted to their first-choice schools, would attend schools with stronger outcomes, fewer reported disciplinary incidents, and more advanced courses and dual-language programs. Although these students, "super travelers," would not necessarily need to travel as far as they plan to for any *one* of these benefits, it is difficult for most of them to find the same *bundle* of benefits in a school closer to home.

Though far from conclusive, these results suggest a need for continued innovation in increasing access to and minimizing the costs of transportation options and for considering school programs holistically when building and managing schools.

## The Benefits and Costs of Traveling Long Distances to School

A 2018 Urban Institute report, *The Road to School*, focused on the demands for transportation in five cities where school choice rates are high and found that most students' commutes seem manageable at less than 20 minutes. But some students go to extraordinary lengths to get to school every day (Blagg et al. 2018). An accompanying feature, "The Early Bell: When School Choice Means Crossing Town," profiles a high school student in Washington, DC, who commutes to school with her grandmother starting at 7:30 a.m. in rush-hour traffic that can make her 10-mile commute as long as an hour and a half. This commute allowed her to attend one of the city's high-performing schools, but her family could not sustain the schedule and enrolled her in the neighborhood school.[1] This student's experience shows the benefits and costs of opting out of neighborhood schools.

Theory and evidence suggest that opting out of the nearest school can offer students benefits in school quality and educational programs, and analyses of school choice suggest that parents and students seek these benefits. Research consistently shows that school quality—typically measured by standardized test scores or local performance ratings—is one of the most influential factors in parents' and students' school choices.[2] Qualitative interviews with parents reveal that, after ruling out low-performing schools, parents consider school culture (e.g., safety, discipline, and relationships between students and teachers and among students) when making choices (Gross, DeArmond, and Denice 2015). Application data show that students, especially high school students, are drawn to schools that offer extracurricular programs (Harris and Larsen 2015).

Opting out of neighborhood schools, however, is associated with costs in terms of time, money, opportunities, neighborhood social ties, and potentially traveling to unsafe areas. Families often share the burden of long commutes and the difficulty of making those arrangements. In 2016, the Center on Reinventing Public Education conducted a survey of parents in eight cities that offer school choice, including Denver. The center found that between 55 and 74 percent of parents reported that their children were driven to school, most by their parents or other family members.[3] Between 16 and 34 percent of parents reported difficulty finding transportation to school for their children (table 1).

Transporting students to school is also expensive. The US Department of Education reports that the nation's school districts spent, on average, $914 per transported student in the 2012–13 school year (Snyder, de Brey, and Dillow 2016, chapter 2). An analysis of school expenditures before and after transitioning to a system in which no students have a default neighborhood school in New Orleans shows that the overall financial burden of transportation increases when students have more school choice (Buerger and Harris 2017).

The biggest cost of commuting is lost opportunities. When students attend schools outside their neighborhoods, they leave behind valuable social supports, connections to other children from the neighborhood, and integrated neighborhood social services. It can also be difficult to engage with the school after hours. Parents might find it difficult to attend after-school events or meet with teachers. When schools do not offer activity buses, students with long commutes find it difficult to stay for after-school extracurricular activities.[4] The Center on Reinventing Public Education's 2016 parent survey found that about 65 percent of parents had children who participated in after-school extracurricular activities. Of those who participated, between 30 and 38 percent said that difficulties with transportation prevented their children from attending these activities occasionally or frequently (table 2).

TABLE 1

**Parent Survey Responses about How Students Get to School**

| | Share of Parents Whose Children Get to School | | | | Share of parents who have difficulty finding transportation for their kids to get to school (%) |
|---|---|---|---|---|---|
| | By car (%) | By school bus (%) | By ride with an adult in the household (%) | By riding with an adult outside the household (%) | |
| Cleveland | 55 | 20 | 73 | 16 | 34 |
| Denver | 66 | 13 | 75 | 11 | 26 |
| Detroit | 67 | 18 | 76 | 13 | 30 |
| Indianapolis | 43 | 49 | 76 | 12 | 16 |
| Memphis | 74 | 16 | 73 | 16 | 19 |
| New Orleans | 58 | 30 | 80 | 10 | 25 |
| Oakland | 72 | 6 | 75 | 12 | 30 |
| Washington, DC | 49 | 12 | 78 | 10 | 23 |

**Source:** Center on Reinventing Public Education parent survey.

**Notes:** The Center on Reinventing Public Education administered the survey by phone in spring 2016. Parents were randomly selected from lists of landline and cell phone numbers of people whose data indicated that they were likely to be parents. Sample weights were generated to represent the city's population of parents. The results in the table are the weighted frequencies and have a 5 percent margin of error.

TABLE 2

**Parent Survey Responses on Children's Participation in Extracurricular Activities**

| | | Share among Those Parents Who Say Transportation | |
|---|---|---|---|
| | Share of parents with children in extracurricular activities (%) | Occasionally interfered with their child's participation | Frequently interfered with their child's participation |
| Cleveland | 49 | 24 | 11 |
| Denver | 60 | 23 | 7 |
| Detroit | 56 | 20 | 16 |
| Indianapolis | 63 | 23 | 8 |
| Memphis | 53 | 28 | 8 |
| New Orleans | 66 | 19 | 11 |
| Oakland | 60 | 26 | 12 |
| Washington, DC | 69 | 23 | 6 |

**Source:** Center on Reinventing Public Education 2016 parent survey.

**Notes:** The Center on Reinventing Public Education administered the survey by phone in spring 2016. Parents were randomly selected from lists of landline and cell phone numbers of people whose data indicated that they were likely to be parents. Sample weights were generated to represent the city's population of parents. The results in the table are the weighted frequencies and have a 5 percent margin of error.

Students traveling long distances to school are exposed to more safety concerns. For example, safety concerns surfaced in Chicago when school closures required students to cross gang lines.[5] When students drive themselves to school, they are exposed to the risk of car accidents.[6] In 2016, 1,908 young drivers ages 15 to 20 died in crashes, and another 654 young adults died as passengers in a young driver's car (NCSA 2018).

How do families weigh these benefits and costs? When students travel long distances to school—like the student in the "Early Bell" feature—is it worth the cost? What are the trade-offs? To answer these questions, we focus on students applying to ninth grade whose first-choice school (the school she or he lists as most preferred on the school choice application) was far from home. We then consider the characteristics of these first-choice schools and whether the student could have selected a similar school closer to home. That these students are likely not selecting schools based on individual characteristics but are more likely looking for a package of qualities.

# Data and Methods

Our data consisted of residential and demographic information for 3,100 students. We matched each student to all district public schools that were open in the 2014–15 school year, contained the student's next grade level, and made no obvious restrictions to their student body (e.g., boys were not matched to all-girl schools). Our final dataset contained nearly 150,000 student-school records. For each, we used Google Maps to calculate the distance and time it would take students to travel via transit or car from their homes to all the schools to which they could have applied.

We linked administrative data from Denver Public Schools with information about the region's geography and public transit system. The Denver Public Schools data include records for all students whose parents submitted school choice applications in spring 2014 for entrance into the ninth grade and whose applications contained a valid (nonmissing) home address. On these applications, students and their families could rank up to five schools. These data include information about students' race or ethnicity, family income (i.e., free or reduced-price lunch status, or FRL status), special education and English language learner status, and gender, as well as the school they currently attend and the schools on their school choice applications.

School-level data come from several sources. Geographic and programmatic (e.g., whether a school is a charter school) information comes from the US Department of Education's Common Core of Data,

and we use four-year graduation rates for the 2013–14 school year from the Colorado Department of Education. ACT test results were furnished by A+ Denver and the Colorado Department of Education.

## Denver Is a City of School Choosers

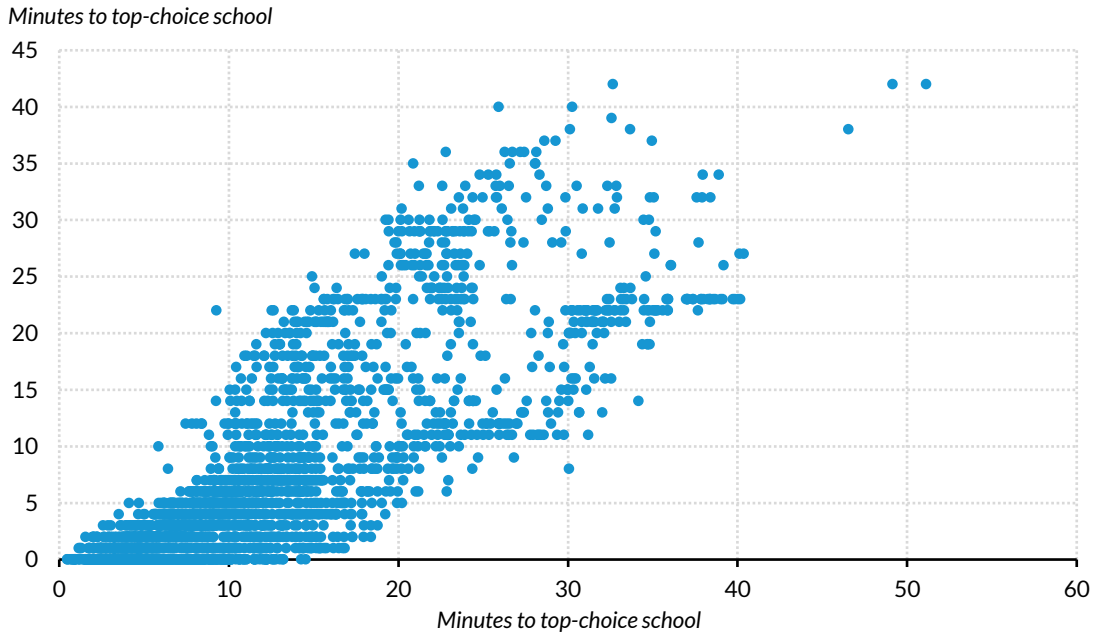
The Denver public school system describes itself as a portfolio of schools, including traditional schools operated by the district, independent district innovation schools, and charter schools. All students are guaranteed a spot in a specific school or cluster of schools, but students are free to apply to any school for which they are eligible (district and charter schools alike). Students apply to all public district and charter schools in the city through a centralized application, and a centralized lottery determines school assignments. Typically, more than 80 percent of students in key transition years (entering kindergarten or moving from fifth to sixth grade or from eighth to ninth grade) submit school choice applications.

Most students applying to high school do not apply to the school closest to where they live. The first choice for the median rising ninth grader is the fourth-closest school.

Denver's high school students mostly select schools within a reasonable distance from their homes. Half of Denver students' first-choice schools require less than a 10-minute drive. But there is considerable variation in travel requirements among students. Figure 1 shows that driving times range from almost 0 minutes to more than 50 minutes each way. Although some students apply for the school closest to them, at least one student selected a school farther from home than 42 other schools. Table 3 shows that median travel times to selected schools seem to vary by students' race or ethnicity, with the city's median black student seeking schools the furthest from home.

FIGURE 1

**Minutes by Car to the First-Choice School and the Number of Other Schools Closer Than the First-Choice School**

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**Source:** Authors' calculations.

TABLE 3

**Median Number of Minutes by Car and the Number of Schools Closer Than the First-Choice School, by Race or Ethnicity**

| | Median number of minutes by car | Median number of schools closer than the first-choice school |
|---|---|---|
| Overall | 9.7 | 4 |
| Black | 14.3 | 7 |
| Hispanic | 8.9 | 4 |
| White | 10.1 | 3 |

**Source:** Authors' calculations.

## Denver's High School Super Travelers

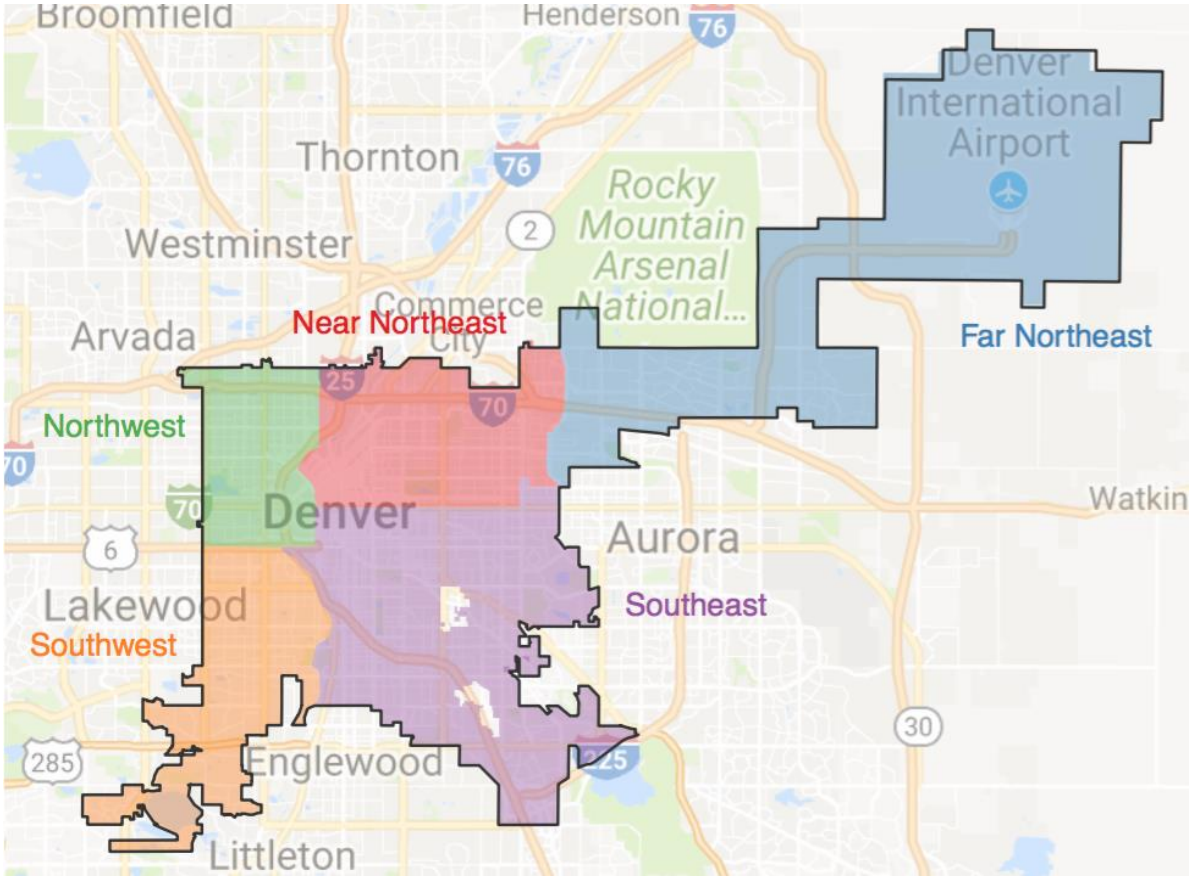
Super travelers fall into the top quartile (above the 75th percentile) of high school students in terms of the amount of time it would take to travel by car to their first-choice school or the number of schools they could have applied to that are closer than their first-choice school. Of the more than 3,100 ninth graders, we identified nearly 1,000 (or 31 percent) as super travelers (table 4).[7]

These super travelers traveled, on average, 21.0 minutes to their first-choice school, and the average number of closer schools they could have applied to was 16.8.[8] In contrast, non–super travelers selected schools that were 7.7 minutes from home by car, and the average number of closer schools they could have applied to was 2.7.

Geographic isolation does not necessarily correspond with super traveler status. The far northeast region is one of Denver's most remote regions, but its students rank third by share of super travelers. The southwest and northwest regions are both separated from the rest of the city by a highway and river, yet 35 percent of students in the northwest region are super travelers and only 22 percent in the southwest region are super travelers.

FIGURE 2

**Denver Regions**




**Source:** Map from Google Maps. R code from David Kahle and Hadley Wickham, "ggmap: Spatial Visualization with ggplot2," *R Journal* 5, no. 1 (June 2013): 144–61.

Traveling long distances to the first-choice school varies by race and ethnicity and by socioeconomic status. More than 50 percent of the city's black students, who disproportionately live in the far northeast region, are super travelers. In contrast, less than a quarter of the city's Hispanic students, who disproportionately live in the southwest region, are super travelers. A higher share of non-FRL students (38 percent) are classified as super travelers compared with FRL-eligible students (29 percent). This is likely because of the need to be economically advantaged to shoulder the costs associated with traveling long distances to school.

*Super travelers are high school students who fall into the top quartile in terms of (1) the amount of time it would take to travel by car from home to their first-choice school or (2) the number of schools they could have applied to that are closer than their first-choice school.*

TABLE 4

**Share of Students Who Are Super Travelers, by Region, Race or Ethnicity, and FRL Status**

| | Share of students (%) |
|---|---|
| Overall | 31.0 |
| **Region** | |
| Far Northeast | 32.0 |
| Near Northeast | 28.6 |
| Northwest | 35.5 |
| Southeast | 37.8 |
| Southwest | 22.4 |
| **Race or ethnicity** | |
| White | 33.9 |
| Black | 50.6 |
| Hispanic | 24.5 |
| Other[a] | 43.6 |
| **FRL status** | |
| FRL eligible | 29.0 |
| Not FRL eligible | 38.0 |

**Source:** Authors' calculations.

**Note:** FRL = free and reduced-price lunch.

[a] Students classified as "other" include American Indians and Native Hawaiians, Asians and Pacific Islanders, and those who listed two or more racial or ethnic groups.

## What Are Super Travelers Traveling For?

School choice gives students the chance to apply to schools that fit their interests and best serve their needs. Analyses of school choice show that the factors driving students' demands include school outcomes, safety, specialized curricula, and academic and extracurricular programs. But do the students who travel the farthest need to go as far as they do to get these benefits? We examine

- whether and how super travelers' first-choice schools show better academic outcomes, greater safety, and greater access to advanced academic course offerings and specialized curricula than the school closest to home; and
- if the student needs to travel as far as they do to see these benefits.

### SUPER TRAVELERS ACCESS HIGHER-PERFORMING SCHOOLS

Prior analyses, including our own, find a strong relationship between school quality and the distance students are willing to travel. This relationship seems to bear out in super travelers' choices. Relative to the schools nearest to home, super travelers choose schools that show stronger outcome measures.

Capturing school quality is challenging, and no single measure provides a complete picture of quality. We consider two outcomes relevant to high schoolers: graduation rates and average ACT scores.[9] On average, super travelers choose, as their first choice, schools with graduation rates 23 percentage points higher and ACT scores 1.59 points higher than the school closest to them. On both measures, black students, if accepted to their first choice, would see the biggest increase in school performance, with gains for Hispanic and white students behind them (table 5).

TABLE 5

**Mean Difference in School Outcomes between First-Choice School and Nearest School (among Super Travelers)**

| | Graduation rate (%) | ACT score |
|---|---|---|
| Overall | 23.1 | 1.59 |
| **Race or ethnicity** | | |
| White | 10.8 | 1.07 |
| Black | 32.0 | 2.17 |
| Hispanic | 27.1 | 1.91 |

**Source:** Authors' calculations.
**Notes:** Positive values indicate that a student's first-choice school has a higher graduation rate or schoolwide average ACT score.

As notable as these improvements are, students would not need to travel as far as their first-choice school to see these benefits. We examined the graduation rates and ACT performance of all schools that

fall between a student's closest school and her or his first-choice school to see if any school closer to home matched or improved the outcomes of the school the student chose.[10] This analysis shows that, on average, super travelers, if they enroll in their first-choice school, would travel 2.72 times farther than necessary for desired gains in graduation rates and 2.91 times farther than necessary for desired gains in ACT performance (figure 3). Given that the average super traveler selects a school about 21 minutes away from home (by car in morning traffic), these results suggest that students could get to a school with a comparable graduation rate in 13 fewer minutes.[11] To see gains in ACT scores, black super travelers extend their travel more than white super travelers.

FIGURE 3A

**Extra Distance Traveled by Super Travelers for Gains in Graduation Rates**

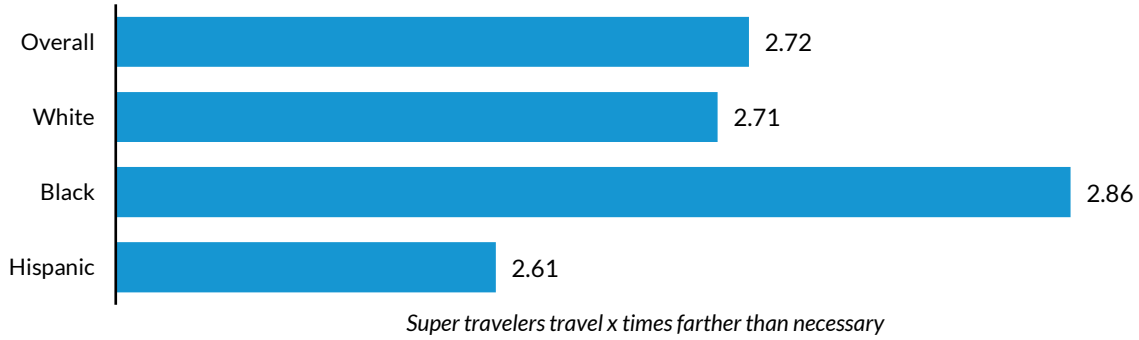
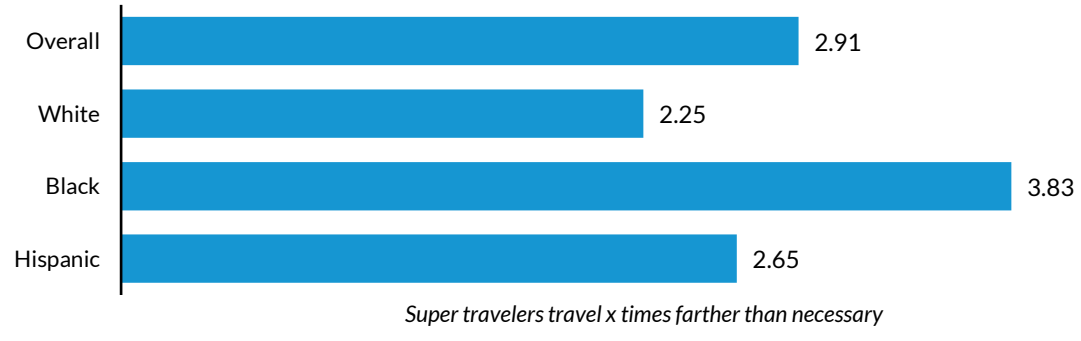



FIGURE 3B

**Extra Distance Traveled by Super Travelers for Gains in ACT Scores**

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**Source:** Authors' calculations.

## SUPER TRAVELERS FIND SAFER SCHOOLS

Safety and discipline in schools has long been a top concern for parents. The Center on Reinventing Public Education's 2014 parent survey shows that safety is a factor for parents when they make school choices, particularly for low-income parents (DeArmond, Jochim, and Lake 2014). Our analysis of super travelers in Denver shows that these students' first-choice schools show lower incidents of discipline than the schools closest to them. Disciplinary incidents are the number of suspensions, expulsions, referrals to law enforcement, and arrests as reported by the US Department of Education's Office of Civil Rights Data Collection. On average, Denver's super travelers' first-choice schools experience seven fewer disciplinary incidents per 100 students than their closest schools. This margin increases to almost 14 incidents for the city's black super travelers (table 6).

TABLE 6

**Mean Difference in Discipline Rates between First-Choice School and Nearest School (among Super Travelers), by Race or Ethnicity**

| | Discipline rate (disciplinary incidents per 100 students) |
|---|---|
| Overall | -7.10 |
| **Race or ethnicity** | |
| White | -3.51 |
| Black | -13.94 |
| Hispanic | -6.43 |

**Source:** Authors' calculations.

**Notes:** The discipline rate is calculated by summing all suspensions, expulsions, referrals to law enforcement, and arrests reported in the US Department of Education's Office of Civil Rights Data Collection data, dividing by the total enrollment at the school, and multiplying by 100. The measure can be defined as the number of disciplinary incidents per 100 students. Negative values indicate that a first-choice school has a lower discipline rate than the nearest school.

Super travelers seem willing to travel farther than necessary to see the same or better improvements in the discipline rate. On average, super travelers' first-choice schools are about 3.4 times farther than necessary to reach a school with similar discipline rates,[12] with black students applying to schools with comparable or lower discipline rates as much as four times farther than necessary.

FIGURE 4

**Extra Distance Traveled for Lower Discipline Rates**


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**Source:** Authors' calculations.

## SUPER TRAVELERS SEARCH FOR ACADEMIC PROGRAMS

High schools differ in the academic programs they offer, with some schools providing access to Advanced Placement (AP) courses that enable students to earn college credit. Other schools offer curricular themes in the arts or sciences.

Using data from an analysis of school programs, we considered whether super travelers demand advanced curricular offerings—such as AP courses, the International Baccalaureate (IB) program, or calculus—schools with art or sport options, schools featuring project-based instructional models, or schools offering dual-language or immersion models.

We assess how much each of these factors was more present in the schools super travelers selected as their first choices compared with schools closest to super travelers' homes. Relative to schools closest to home, the schools super travelers most preferred were more likely to offer advanced curricula (AP, IB, or calculus) and more likely to offer dual-language or immersion programs. The schools super travelers preferred, however, were only slightly more likely to offer sports or arts themes and were a little less likely to offer a project-based approach. Notably, sports and arts programs are present in 70 and 81 percent of high schools, respectively. Their ubiquity makes them less likely to be determining factors when choosing schools.

TABLE 7

**Mean Difference in Academic and Extracurricular Programs between a Student's First-Choice School and Nearest School (among Super Travelers)**

| | AP or IB | Calculus | Dual language and immersion | Sports | Music, drama, art | Project-based learning |
|---|---|---|---|---|---|---|
| Overall | 0.14 | 0.31 | 0.25 | 0.10 | 0.10 | -0.04 |
| **Race or ethnicity** | | | | | | |
| White | 0.15 | 0.21 | 0.35 | 0.05 | 0.04 | -0.09 |
| Black | 0.08 | 0.34 | 0.41 | 0.07 | 0.06 | -0.06 |
| Hispanic | 0.17 | 0.36 | 0.15 | 0.12 | 0.15 | -0.02 |

**Source:** Authors' calculations.

**Notes:** AP = Advanced Placement; IB = International Baccalaureate. All variables are measured in binary terms (either a school does or does not offer those courses or programs). Positive values indicate that a first-choice school is, on average, more likely than the nearest school to offer such courses or programs.

Many Denver high schools have advanced curricular offerings and dual-language programs. Many super travelers could find schools offering these programs close to home. On average, super travelers attending their first-choice schools would travel almost five times farther than necessary for AP courses or the IB program, almost four times farther than necessary for calculus, and almost twice as far as necessary for dual language (figure 5).

FIGURE 5A

**Extra Distance Traveled for Advanced Placement Courses or the International Baccalaureate Program**

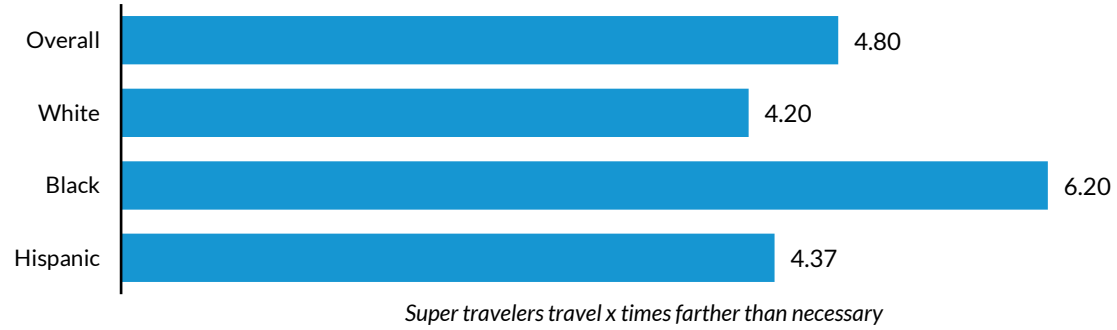



FIGURE 5B

**Extra Distance Traveled for Calculus**

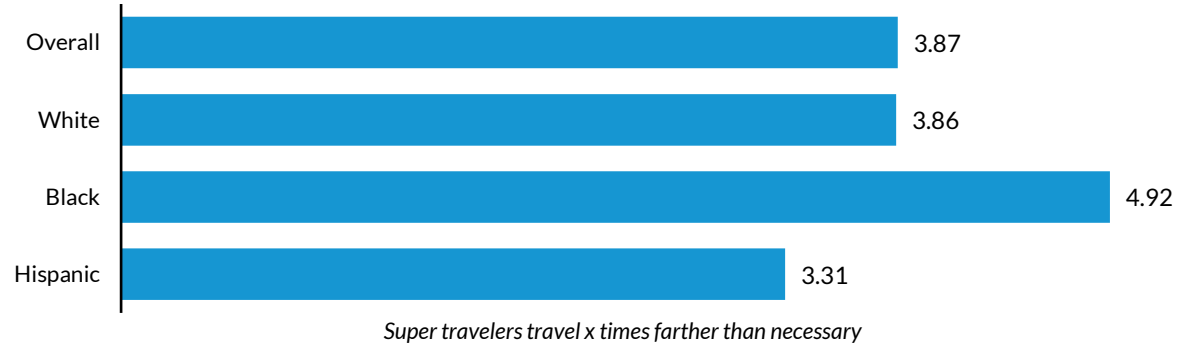
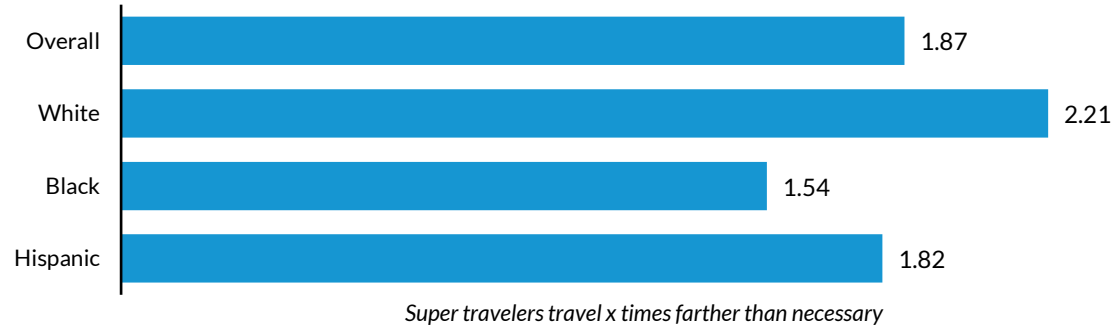



FIGURE 5C

**Extra Distance Traveled for Dual Language**

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**Source:** Authors' calculations.

### SCHOOLS ARE COMPLEX GOODS

Our analysis suggests that Denver's super travelers would find real benefits from traveling to their schools of choice rather than attending schools close to home. But these students do not necessarily need to travel as far as they seem willing to get the benefits they seek.

But schools are complex goods. When selecting a school, parents and students focus on several factors. If we consider schools to be a bundle of the factors (e.g., academic outcomes, curricular or extracurricular offerings, and school culture and discipline approach), could super travelers still find a school closer to home?

The answer: probably not. Of the roughly 1,000 super travelers, only 22 percent could find another school offering a similar package of benefits closer than their first-choice school. Using the extra-distance-traveled metrics as above, on average, students selected schools that were only 1.2 times as far as they needed for the same bundle of traits. If we consider a school to be a bundle of desirable traits, super travelers rarely select schools that require more travel than necessary.

When we relax the requirement, suggesting that only five of the six factors need to match, 70 percent of super travelers could find a closer school offering a similar benefits package as their first choice. On average, students selected schools that were 1.9 times farther than necessary for traits that matched five of the six aforementioned criteria. When we require only four of six factors to match, about 83 percent of super travelers can find a closer school with a similar benefits package. In this scenario, many students can get closer to, but not quite reach, their preferred bundle.

## Conclusion

Denver students applying to schools far from home opt for schools that give them access to better outcomes and fewer disciplinary incidents than the schools closest to their homes. These choices also give students access to desirable programmatic offerings. Although they could have found a school with any one of these factors closer to home, few could have found schools closer to home that matched all their desired criteria.

Parents and students select schools based on a bundle of factors. In fall 2017, we observed a counselor working with a student who was preparing to apply for high school. The student had done her research and had chosen a school that would require boarding a city bus at about 6:30 a.m. and travel well out of her neighborhood to be at school by the 8:00 a.m. start time. When discussing why she selected the school, she explained that she liked the classes and the culture, that most students went to

college, and that many of her friends were also applying to the school. She liked the whole package, and she thought it was worth the trip.

Before cities and school systems can respond to the findings in this report, they must address several important questions: What are the costs to the students who make these long commutes (e.g., the financial burden, the stress on families, and the opportunity costs of leaving neighborhoods)? How often do these costs force super travelers to transfer back to closer schools? What strategies can mitigate the costs of long commutes? What bundles of factors do students and parents demand? How available are these bundles? How many more students would seek these bundles if they were more easily accessible?

The answers to these questions are vital to informing policy decisions. In the meantime, students will continue to seek schools that are far from home because they do not see a better option closer to home. For these students, cities and school systems could explore strategies to reduce the costs of traveling to school. What low-cost transportation options could be provided? Can districts reach out to schools to negotiate start times that are more reasonable for super travelers? Are there ways to coordinate with neighborhood services to make sure students who arrive home from school late can still access the services near their homes?

School systems that map out their portfolio of schools should think about schools more holistically, as parents and students do. Rather than focusing only on whether a school shows strong outcomes, school systems should consider the whole package—performance, environment, culture, and special programs offered. Providing students across the city diverse and desirable bundles of factors will ensure that all students can choose high-quality schools.

# Notes

[1] "The Early Bell: When School Choice Means Crossing Town," Urban Institute, March 14, 2018, https://apps.urban.org/features/school-transportation/.

[2] See Denice and Gross (2016); Jacob and Lefgren (2007); Tedin and Weiher (2004); Hastings and Weinstein (2008); Hastings, Kane, and Staiger (2005); Buckley and Schneider (2003); Phillips, Hausman, and Larsen (2012); and Reback (2008).

[3] The eight cities surveyed were Cleveland, Denver, Detroit, Indianapolis, Memphis, New Orleans, Oakland, and Washington, DC.

[4] Susan Frey, "Rural Communities Struggle to Provide After-School Programs," *EdSource*, January 27, 2015, https://edsource.org/2015/rural-communities-rely-on-after-school-programs/73187.

[5] See Monica Davey, "In Chicago, Campaign to Provide Safe Passage on Way to School," *New York Times*, August 26, 2013, https://www.nytimes.com/2013/08/27/education/in-chicago-campaign-to-provide-safe-passage-on-way-to-school.html. Safety was the main reason students displaced from closed schools enrolled in the school closest to home instead of designated "welcome schools." See de la Torre and coauthors (2015).

[6] The Centers for Disease Control and Prevention reports that car accidents are the leading cause of death among US teens. See "Teen Drivers: Get the Facts," Centers for Disease Control and Prevention, last updated October 16, 2017, https://www.cdc.gov/motorvehiclesafety/teen_drivers/teendrivers_factsheet.html.

[7] Of these nearly 1,000 super travelers, 16 percent were in the top quartile in terms of how long it took them to travel by car to their first-choice school, 19 percent were in the top quartile in terms of the number of schools that were closer than their first-choice school, and 65 percent were in the top quartile of both distance indicators.

[8] In Denver, several high school buildings host more than one school. Passing a single building could mean passing over multiple schools.

[9] Until the 2016–17 school year, all Colorado 11th graders were required to take the ACT.

[10] We defined a school that matched on the graduation rate as one that falls within 2 percentage points of the graduation rate the student's selected school. We defined a school that matched on ACT scores as one that falls within 0.5 points of the average ACT score that the student selected.

[11] We arrived at this estimate based on the average super traveler time of 21 minutes and calculated as 21–(21/2.72).

[12] We defined a school as matching the discipline rate if the school fell within 1 percentage point of the discipline rate of the school the student selected.

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