

# The Burden of Choice: Assessing the Impact of Charter School Options on Household Travel Behavior in Philadelphia

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Federal Reserve System Community Development Research Conference  
*Panel: Housing and Neighborhoods: Place Effects on Educational Achievement (Community Conditions track)*

March 24, 2017 — Washington, DC

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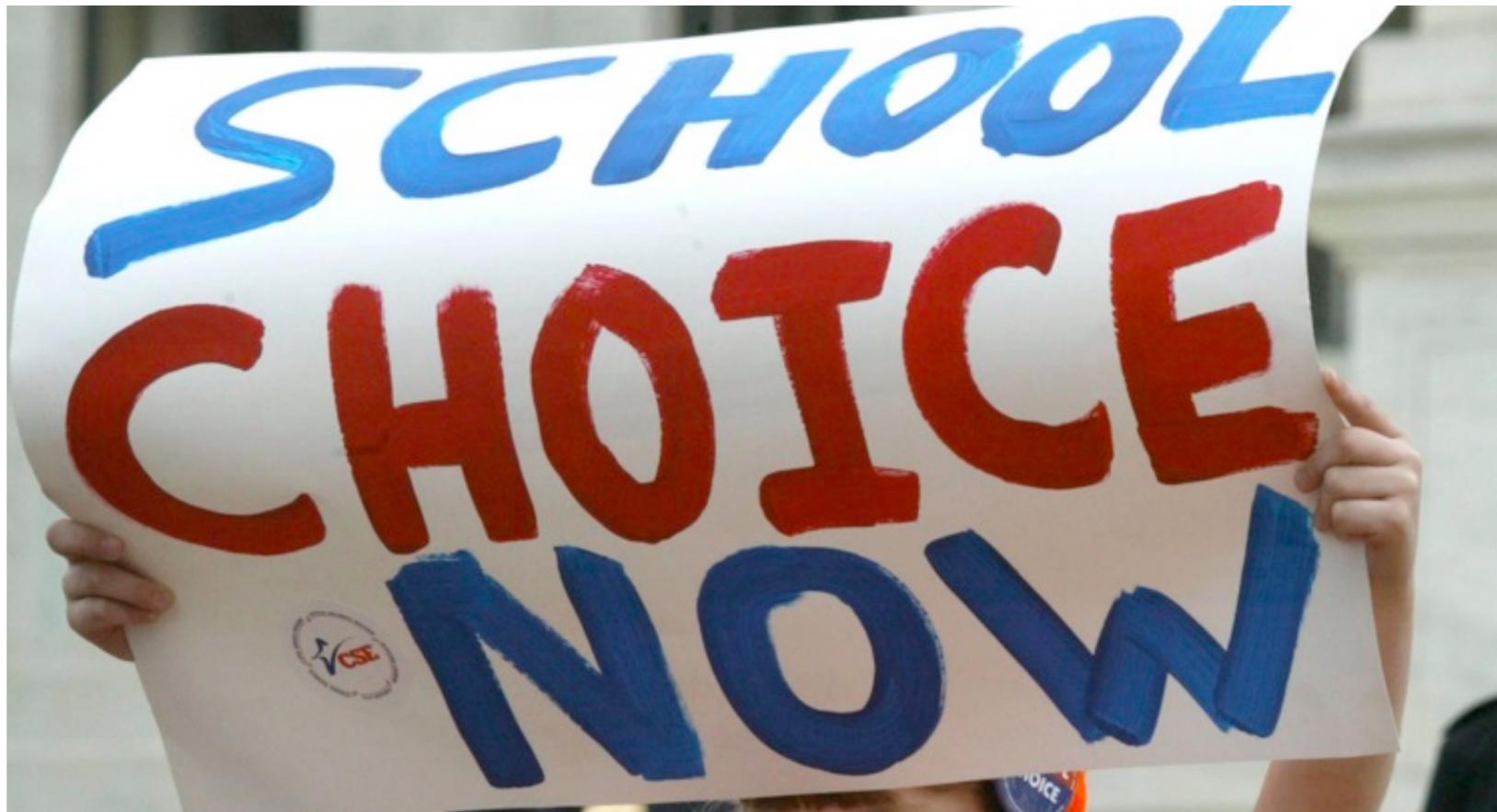
## The next 12-15 minutes...

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- Nexus: Neighborhoods and household travel
- Gap: New conditions, new questions
- Evidence from Philadelphia
- Implications



Photo: Tieshka Smith, Philadelphia School Closing Photo Collective



Source: Media Trackers <http://mediatrackers.org/pennsylvania/2013/07/19/stanford-study-on-charter-schools-media-coverage-under-fire-in-pennsylvania>



Source: Citizen.Education: <http://citizen.education/index.php/2015/09/09/charter-school-teachers-see-what-unions-do/>



- ◆ How does choosing a charter school affect transportation choice, and the time, distance, and cost burdens associated with getting to school?
- ◆ How do these choices and their attendant burdens compare across students in neighborhood public schools and charter schools?
- ◆ For those choosing charter schools, what is the trade-off for their different travel burden vis-a-vis school and neighborhood characteristics?



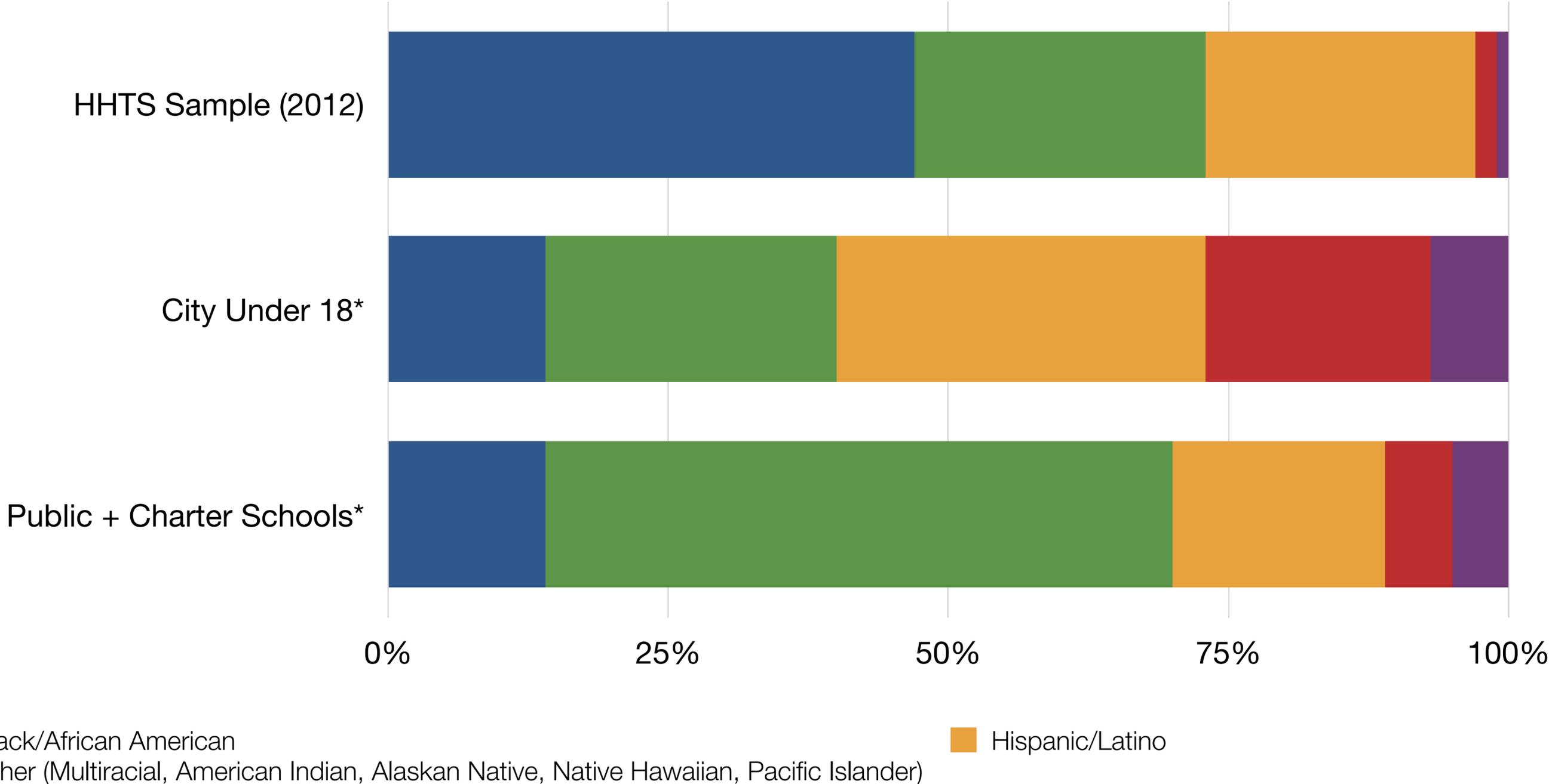
Photo: Matt Stanley, The Philadelphia School Closing Photo Collective

# Data and Methods

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# HHTS sample is not reflective of Philadelphia's school-aged or school district population.

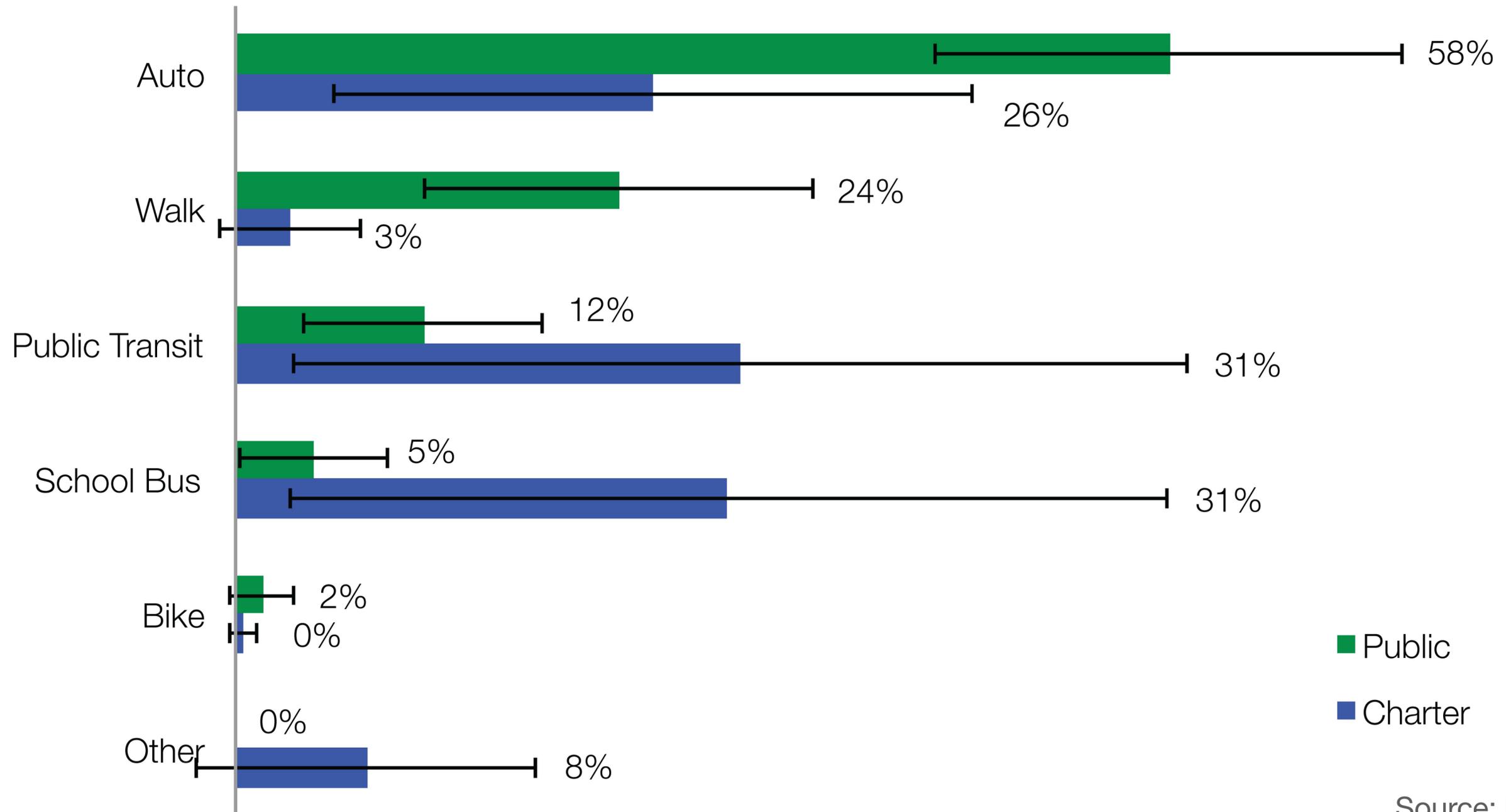


Sources: DVRPC, U.S. Census, School District of Philadelphia

\*City Under 18 and School data from 2014-2015

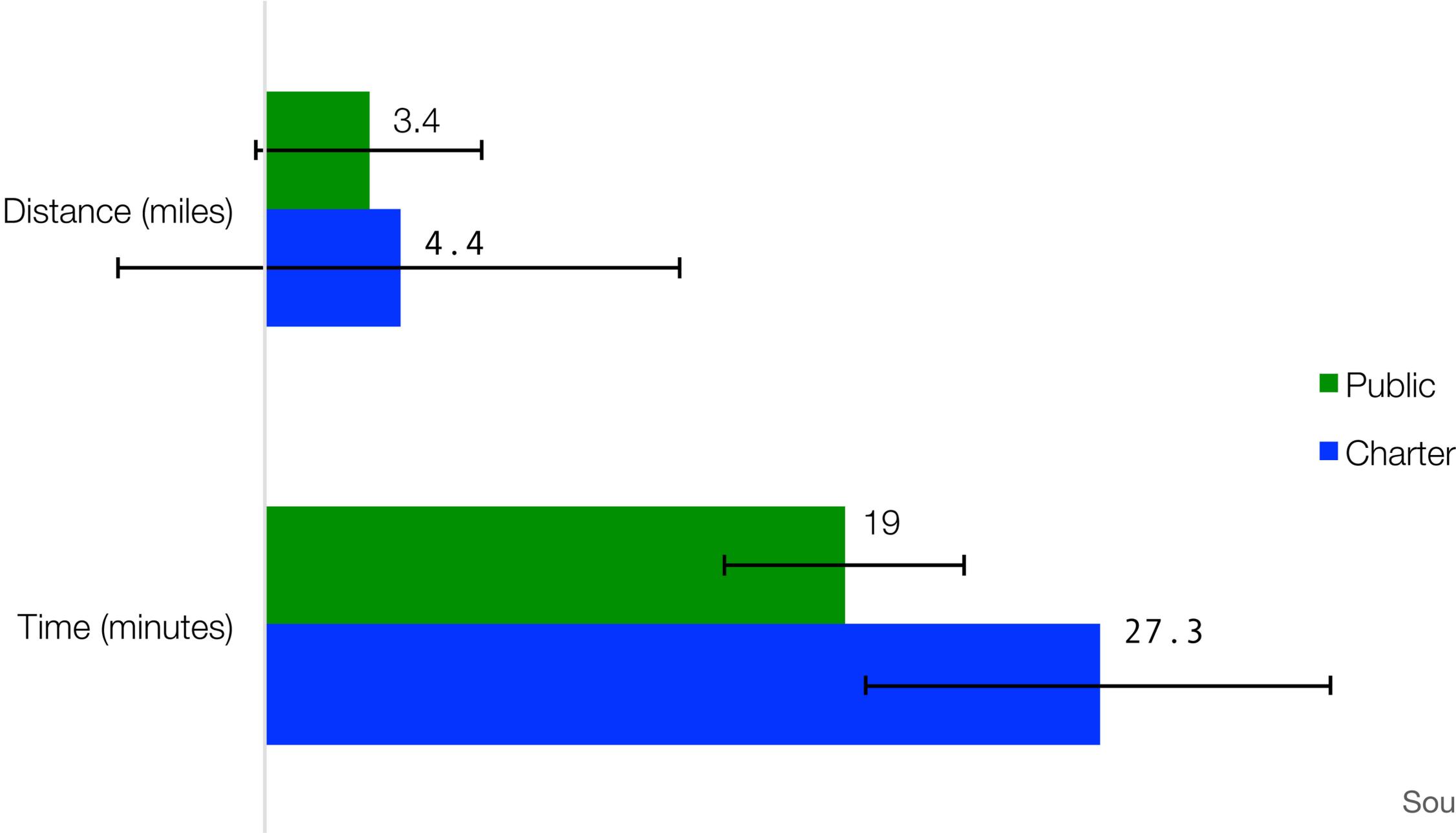
# Charter school students drive less, use public and district transportation more than public school students.

Mode choice by school type (2012)



# Charter school students travel for longer time and further distance than public school students.

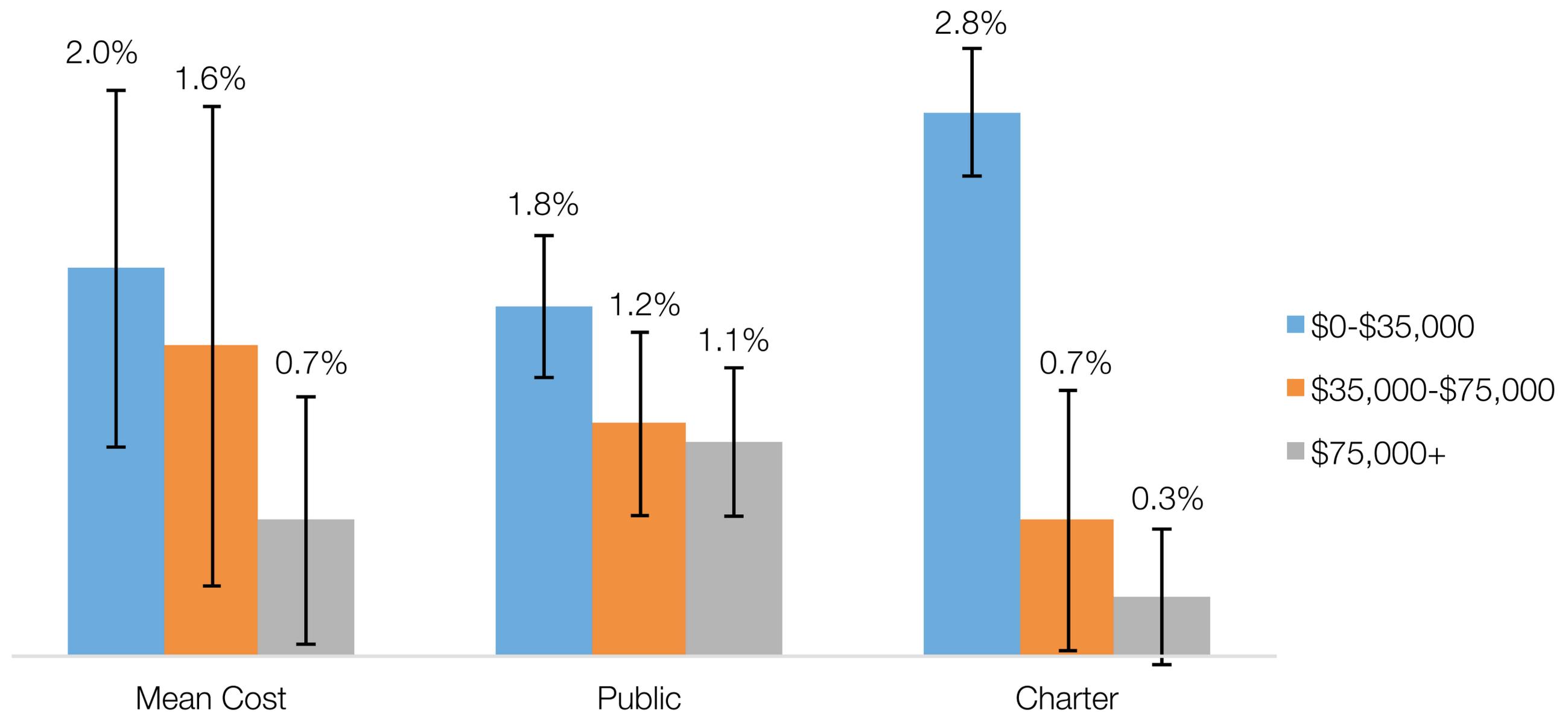
Travel distance and time by school type (2012)



Source: DVRPC

# Low-income families sending children to charter or public schools face the highest cost burden of any income group.

School travel cost burden by school type (2012)



# Fewer charter school students live in and attend schools in low crime neighborhoods.

## Proportion of census tracts in each tercile of crime

	Home tract		School tract	
	Public	Charter	Public	Charter
Low Crime	33%	10%	29%	6%
Medium Crime	49%	45%	38%	58%
High Crime	18%	45%	32%	35%

Significant differences between public and charter schools in both home tracts ( $p = 0.004$ ) and school tracts ( $p = 0.02$ ), Fisher's exact test.

Includes Part I crimes: homicide, rape, robbery, aggravated assault, and property crimes of burglary, theft and vehicle theft.

Source: Philadelphia Police Department vis Open Data Philly

What do charter school students gain or lose by choosing to leave their neighborhood?

# More charter school students attend schools in safer neighborhoods than their assigned public schools.

	Charter tract	Assigned public school tract
Low Crime	21%	5%
Medium Crime	33%	60%
High Crime	47%	35%

Fisher's exact test of proportions ( $p = 0.015$ )

Includes Part I crimes: homicide, rape, robbery, aggravated assault, and property crimes of burglary, theft and vehicle theft.

Source: Philadelphia Police Department vis Open Data Philly

On average, charter school students attend schools that are higher performing than their assigned public school.

**Math**  
**(proficient or higher)**

+ 17 percentage points

**Reading**  
**(proficient or higher)**

+ 19 percentage points



Photo: Catharine Brinkley, Philadelphia School Closing Photo Collective



Photo: Jill Saul, Philadelphia School Closing Photo Collective



Photo: Matt Stanley, Philadelphia School Closing Photo Collective

# Implications



Photo: Matt Stanley, The Philadelphia School Closing Photo Collective

**THANK YOU!**

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