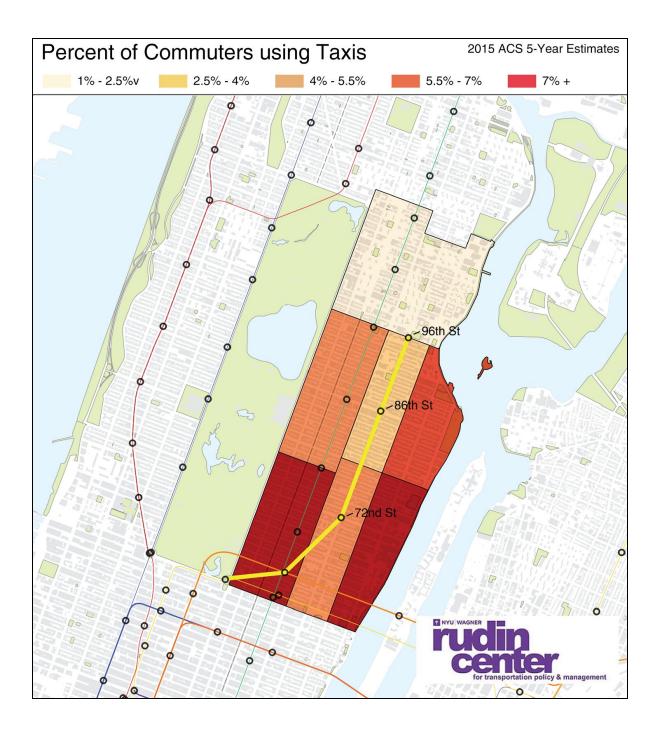
Upper East Side Taxis and the Second Avenue Subway Sarah M. Kaufman and Ari L. Kaputkin NYU Rudin Center for Transportation

Since the opening of the Second Avenue Subway's three new stations on January 1, 2017, taxi pickups and dropoffs in the immediate vicinity have declined, according to a new report by NYU's Rudin Center for Transportation.

Along the Second Avenue Subway (SAS) corridor, taxi use has historically been higher than in other Upper East Side of Manhattan neighborhoods. In the Lenox Hill East neighborhood, 9% of residents reported using taxis for their commute to work, and in Yorkville East, which once boasted the residential address furthest from any subway station in Manhattan, 7.3% of residents commuted by taxi. In Manhattan as a whole, only 2.9% of commuters relied on taxis as their main mode of commuting¹.

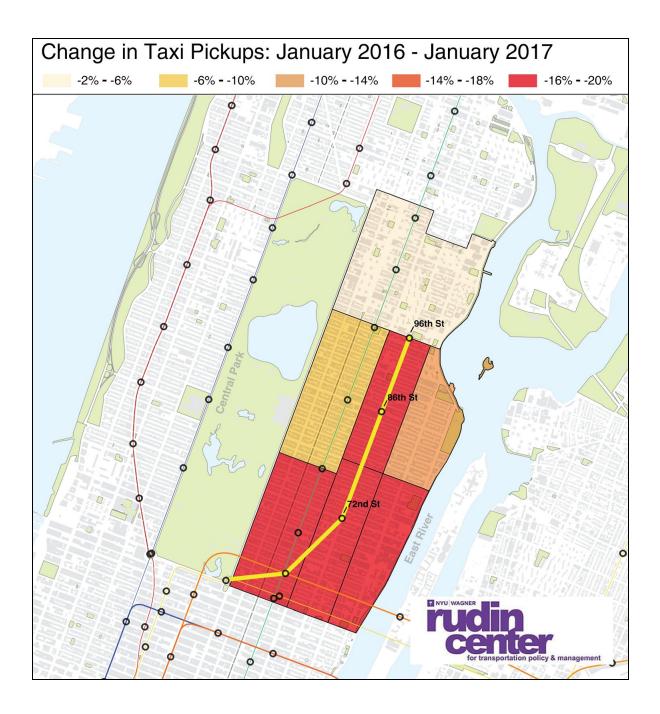
¹ 2015 American Community Survey 5-Year Estimate

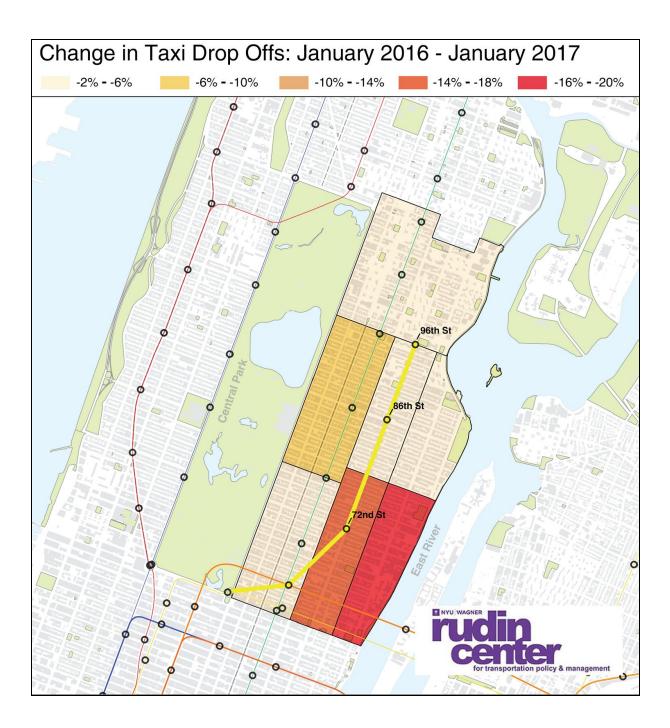


Since the SAS opened, taxi pickups and dropoffs have decreased in all taxi zones, as compared to the previous year. The extent of these changes varies by neighborhood; areas closest to the new subway stations have most strongly reduced taxi demand. There has also been a greater reduction in pickups versus dropoffs overall.

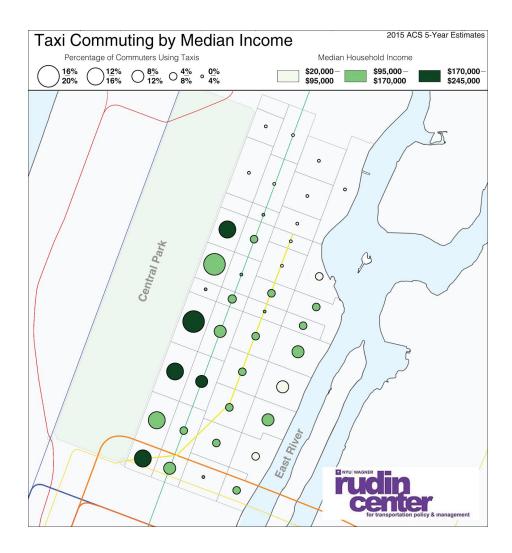
Taxi Zone	Change in Pickups	Change in Dropoffs
East Harlem South	-2.31%	-3.26%
Yorkville West	-18.37%	-2.28%
Yorkville East	-9.45%	-4.16%
Upper East Side South	-19.14%	-4.16%
Upper East Side North	-7.26%	-8.58%
Lenox Hill East	-19.94%	-18.27%
Lenox Hill West	-18.63%	-13.77%

Percent Change in Pickups and Dropoffs: January 2016 vs. January 2017





When comparing taxi reliance among Census Tracts, the importance of the Second Avenue Subway is more evident. Given the high cost of taxis as a primary commute mode, taxi reliance correlates with higher-income populations. In Upper East Side North and Upper East Side South where median incomes are the highest, the percentage of commuters relying on taxis is highest. Conversely, in East Harlem South, where taxi demand is consistently low, median incomes are the lowest in our study area. The SAS has supplied an essential, affordable transportation mode on the Upper East Side for residents, reducing the neighborhood's reliance on taxis. The extension of the SAS line north to 106th, 116th and 126th streets as planned would provide greater access to transit in a neighborhood that is presently far from subway access and relatively low-income.



This study is limited to Yellow Taxi data. Further research should use data from for-hire vehicles, including Uber and other ridesharing services, to understand the net impact of the new SAS.

Methodology

Taxi pickup and dropoff data was acquired from the New York City Taxi and Limousine Commission. Since 2014, the TLC published all pickup and dropoff locations of their fares. Previously these locations were reported as exact geographic coordinates, but due to privacy concerns, have recently been aggregated to taxi zones, which are essentially neighborhood zones made up of five to six census tracts. This report focuses on taxi pickups and dropoffs in the taxi zones that encompass the new Second Avenue Subway stations and the taxi zones that directly border them. In total, seven taxi zones encompass the designated Second Avenue Subway corridor in this study: East Harlem South, Lenox Hill East, Lenox Hill West, Upper East Side North, Upper East Side South, Yorkville East, and Yorkville West.

The NYU Rudin Center for Transportation compared one week of pickups and dropoffs in these zones for one week in January 2016 (January 11-15) and January 2017 (January 9-13). We calculated the percent change in the number of pickups and dropoffs for each taxi zone between the two time periods. In mapping these percent changes, we categorized the data into five equal numerical ranges. In addition, we analyzed commuting mode share in the census tracts that make up the taxi zones. Using the 2015 American Community Survey 5-year estimates, we calculated the percent mode share for commuters using taxis and public transportation in each census tract.

Median income data is by Census Tract and derived from 2015 American Community Survey 5-year Estimates.