



UBER-POSITIVE

The Ride-Share Firm Expands Transportation Options in Low-Income New York

Jared Meyer
Fellow

EXECUTIVE SUMMARY

In New York City, the rise of Uber—which holds a 90 percent citywide market share¹ of smartphone-facilitated ride-sharing services—has occurred in the context of a history of licensing restrictions on for-hire vehicles, particularly those that can be hailed in densely populated “core” Manhattan (i.e., south of West 110th Street and south of East 96th Street). Today, there are 13,437 yellow-cab medallions, which permit street hails anywhere in NYC, a figure down from 16,900 in 1937, when New York first adopted its medallion system²—despite the fact that the city’s population is now 20 percent larger.³

NYC’s medallion cap has long prompted concern that taxi service is concentrated in affluent core Manhattan neighborhoods and at city airports—to the detriment of lower-income, minority residents who tend to reside in outer-borough neighborhoods where street hails are scarce. In recent years, the city has sought to reduce transportation inequalities by issuing additional taxi licenses to green-colored “boro taxis,” which permit street hails in noncore Manhattan, the Bronx, Queens (excluding Kennedy and LaGuardia airports), and Staten Island, as well as unrestricted drop-offs.⁴

Despite such efforts, the NYC Taxi and Limousine Commission (TLC), the city regulator, stated in a 2013 study: “Until more

Boro Taxis go into service, residents of many NYC neighborhoods will have few convenient options other than continued reliance on illegally street-hailed FHV's [for-hire vehicles].”⁵ Do New Yorkers in outer boroughs now have more choice in how they get around? This paper examines the extent to which UberX—Uber’s lowest-cost, non-luxury, most frequently used service—expanded transportation options in NYC in 2014, particularly in low-income neighborhoods. Key findings for 2014 include:

- 1. UberX still a small fraction of yellow-taxi rides.** UberX rides expanded dramatically, from 287,000 in January to 1,594,000 in December. However, the 9.5 million total UberX rides was equal to only about 5 percent of the city’s 175 million yellow-taxi rides.
- 2. UberX far less Manhattan-focused.** Only 6 percent of yellow-taxi pickups were outside Manhattan or outside city airports—compared with 22 percent for UberX.
- 3. UberX growing fast in low-income neighborhoods.** Of UberX rides in noncore Manhattan and non-airport zip codes in December, 60 percent were in zip codes with median household income below the noncore Manhattan median—up from 54 percent in January.
- 4. UberX serves predominantly nonwhite, as well as predominantly white, neighborhoods.** In the 29 noncore Manhattan and non-airport zip codes with one or more UberX pickups per household, black households constituted 29 percent of all households, while the average for all 146 noncore Manhattan zip codes was 27 percent. The aforementioned 29 zip codes included neighborhoods ranging from Greenpoint and Park Slope—where less than 5 percent of households are black—to Crown Heights and Harlem, where more than 75 percent of households are black.
- 5. UberX not concentrated at rush hour.** Some 2.22 million UberX rides began during 10 AM–4 PM, 4.26 million began during 7 PM–7 AM, and 2.97 million, or 31 percent, began during rush hour.

I. INTRODUCTION

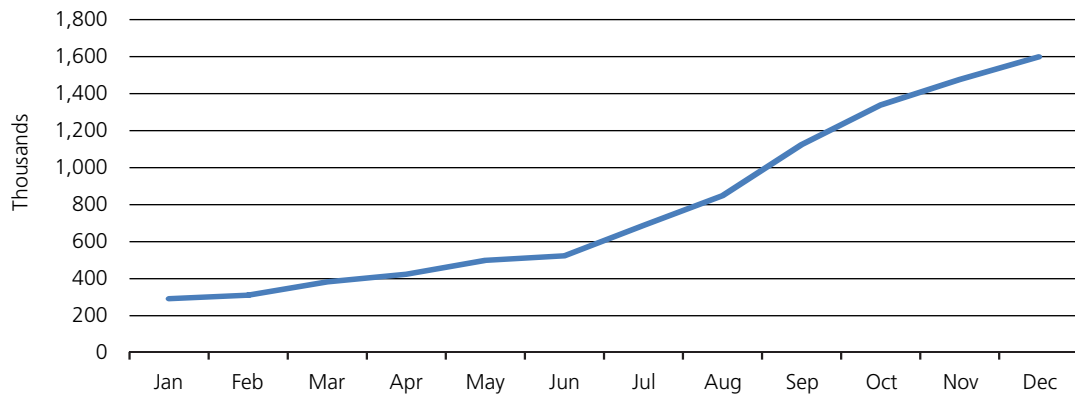
In recent years, Uber Technologies Inc. and other transportation-network firms, whose “ride-sharing” services connect passengers with independent drivers via smartphone applications,⁶ have grown dramatically. This growth has sparked concern among some public officials, as well as legal challenges from established transportation interests.⁷ As a result, governments in the U.S. and elsewhere have taken different regulatory approaches.

In 2011, Uber—now New York’s dominant ride-sharing app and the subject of this paper—first entered NYC.⁸ In 2014, its popularity grew markedly. In July 2015, NYC mayor Bill de Blasio proposed a temporary limitation on Uber’s growth to allow the city to evaluate the industry’s effect on Manhattan’s increasing traffic congestion.⁹ After a public outcry denouncing the restriction, a compromise was reached: a four-month traffic study would be conducted, but ride-sharing companies would remain free to continue expanding.¹⁰

Because of its focus on congestion, the aforementioned study may not, however, answer other important questions related to Uber’s ability to expand transportation options in NYC. For this reason, Uber agreed to share its proprietary ride data with the Manhattan Institute to allow for a thorough, independent evaluation of every Uber-facilitated ride in NYC in 2014.¹¹

The data, organized by day and hour of ride, mask the identity of individual riders—such that race, income, and other personal information are not revealed. The data include starting and ending zip codes as well as the type of Uber service provided—from UberX, the least expensive, to UberBLACK and UberSUV, the most expensive.¹² Because more expensive Uber services, including the last two, are less common and tend to be used for business travel, this paper focuses exclusively on rides facilitated by UberX, with special emphasis on rides serving less affluent neighborhoods beyond core Manhattan.¹³

Figure I. Monthly UberX Rides in NYC, 2014



Source: Uber ride data

II. FINDINGS

In 2014, UberX ridership in NYC soared: from 287,000 rides in January to 1,594,000 rides in December, an increase of more than 450 percent (**Figure 1**). In all of 2014, 9,449,000 UberX rides began and ended in NYC.

Figure 2 reveals that both the geographical distribution and volume of UberX trips differ from those of yellow taxis: the latter take 175 million trips annually; the former took fewer than 9.5 million in 2014. Further, 90.3 percent of yellow-taxi rides

began in Manhattan, compared with 73.8 percent for UberX. While their respective share of pickups in the Bronx (0.9 percent for yellow taxis vs. 1.1 percent for UberX), Staten Island (0.8 percent vs. less than 0.1 percent), and NYC airports (3.5 percent vs. 3.8 percent) were similar, pickup shares in Queens (1.5 percent vs. 4.3 percent) and Brooklyn (3.1 percent vs. 16.8 percent) diverged significantly.

The data also reveal that UberX became less Manhattan-focused as 2014 progressed: in January, 20 percent of its pickups were outside core Manhattan and outside city airports; in December, that figure was 27 percent.

Figure 2. Proportion of Yellow-Taxi and UberX Pickups, by NYC Borough and Airports, 2014

	Yellow Taxi		UberX	
	Percentage	Pickups (millions)	Percentage	Pickups (millions)
Manhattan	90.3%	158.0	73.8%	6.97
Bronx	0.9%	1.6	1.1%	0.10
Brooklyn	3.1%	5.4	16.8%	1.58
Queens	1.5%	2.6	4.3%	0.40
Staten Island	0.8%	1.4	<.1%	0.01
Airports*	3.5%	6.1	3.8%	0.36

*John F. Kennedy International Airport and LaGuardia Airport
Source: Uber ride data and TLC's 2014 Taxicab Fact Book

Figure 3 ranks the frequency of UberX pickups, per household, in NYC zip codes beyond core Manhattan—focusing on the 29 zip codes with one or more pickups per household in 2014.¹⁴ For each zip code, Figure 3 indicates the respective borough; percentage increase in pickups in December versus in January; median income;¹⁵ and percentage of black households.

In 2014, there were 1,761,000 UberX pickups in the 29 zip codes—equal to 19 percent of all UberX pickups in NYC for

the year, as well as 75 percent of all UberX pickups beyond core Manhattan. Fourteen zip codes were located in Brooklyn, eight in noncore Manhattan, and seven in Queens. Median incomes in the 29 zip codes ranged from \$24,533 to \$95,654. Nineteen zip codes (blue boxes), or two-thirds, had household incomes below \$52,500, the NYC median for zip codes beyond core Manhattan.

In 2014, of the ten zip codes with the greatest number of UberX pickups, per household, beyond core Manhattan, four had household incomes below the noncore Manhattan median; and of the ten fastest-growing zip codes in UberX pickups, per household, beyond core Manhattan—surging, on average, by more than 1,000 percent—six had incomes below the noncore Manhattan median.

Figure 3. UberX Pickups in NYC Zip Codes—with One or More Pickups per Household—Beyond Core Manhattan, 2014

Zip Code	Borough	Trips per Household	% Increase, Dec. 2014 vs. Jan. 2014	Median Income	Black Households, %
11211	Brooklyn	8.82	438%	\$46,848	5%
11201	Brooklyn	7.94	297%	\$95,369	11%
11222	Brooklyn	7.01	288%	\$63,739	2%
11101	Queens	6.47	741%	\$47,142	17%
11217	Brooklyn	5.59	338%	\$81,862	20%
11231	Brooklyn	5.14	388%	\$78,174	12%
11205	Brooklyn	4.62	346%	\$44,688	38%
11238	Brooklyn	4.39	389%	\$65,315	42%
11215	Brooklyn	4.14	466%	\$95,654	4%
11206	Brooklyn	3.22	488%	\$28,559	29%
11237	Brooklyn	2.91	589%	\$40,372	13%
11216	Brooklyn	2.39	466%	\$43,996	74%
10027	Manhattan	2.16	1,059%	\$37,872	46%
11232	Brooklyn	2.02	675%	\$43,595	4%
10035	Manhattan	1.97	960%	\$24,533	41%
11221	Brooklyn	1.95	664%	\$39,178	59%
10026	Manhattan	1.66	918%	\$43,107	59%
11103	Queens	1.61	1,276%	\$55,129	3%
11106	Queens	1.47	1,231%	\$48,720	9%
11102	Queens	1.44	1,196%	\$49,924	8%
11105	Queens	1.32	1,144%	\$57,525	2%
10029	Manhattan	1.29	629%	\$31,888	31%
11104	Queens	1.21	1,104%	\$56,059	1%
11225	Brooklyn	1.18	680%	\$42,922	75%
10032	Manhattan	1.11	1,252%	\$34,568	28%
10031	Manhattan	1.08	1,060%	\$37,655	40%
10030	Manhattan	1.04	1,265%	\$31,925	71%
11369	Queens	1.02	1,295%	\$53,617	21%
10037	Manhattan	1.00	1,080%	\$37,341	79%

Source: Uber ride data and American Community Survey 2013 data

Of the 29 zip codes listed in Figure 3, black households constituted 29 percent of all households, on average. By contrast, the 2014 average for all 146 NYC zip codes beyond core Manhattan—including those with fewer than one UberX pickup, per household—was 27 percent. The aforementioned 29 zip codes included neighborhoods ranging from Greenpoint and Park Slope—where less than 5 percent of households are black—to Crown Heights and Harlem, where more than 75 percent of households are black.

The data also reveal that of UberX’s pickups in NYC’s 146 noncore Manhattan zip codes during January 2014, 54 percent were in zip codes with household income below the noncore Manhattan median. During December 2014, that figure climbed to 60 percent. In other words, there were roughly 200,000 *more* UberX pickups in less affluent NYC zip codes in December 2014 than in January 2014.

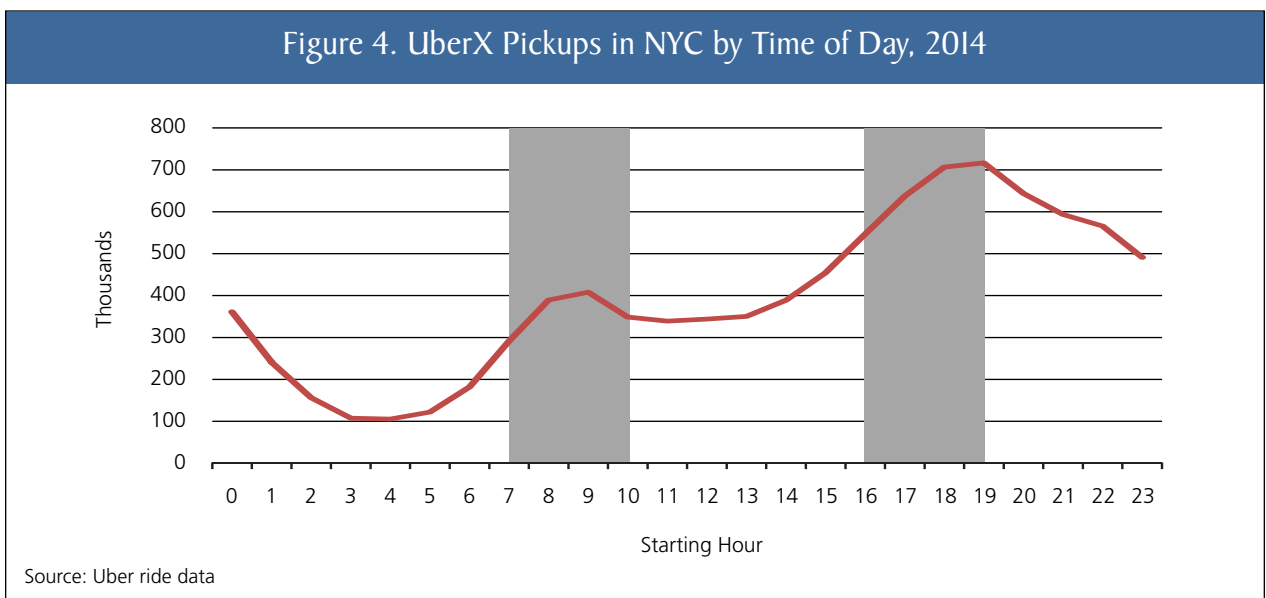
Further, during January 2014, UberX pickups in above-median (noncore Manhattan) household income zip codes equaled an annualized 0.33 per household; while their below-median counterparts equaled 0.24 per household (i.e., in early 2014, less affluent zip codes saw 73 percent of the UberX pickups, per household, of more affluent zip codes).

But during December 2014, the figures were 2.10 and 1.97, respectively (i.e., in late 2014, less affluent zip codes saw 94 percent of the UberX pickups, per household, of more affluent zip codes).

Figure 4 charts UberX pickups in all of NYC in 2014, by time of day (shaded areas indicate rush hour): pickups peaked for rides during the 7 PM (19h) hour and were lowest for rides starting between 3 AM (03h) and 6 AM (06h).¹⁶ Notably, UberX hourly pickups were greater during 7 PM–12 AM than during the morning rush hour (7 AM–10 AM).¹⁷

III. CONCLUSION

These findings indicate that ride-sharing services—notably, Uber—increasingly provide New Yorkers in lower-income and minority neighborhoods beyond core Manhattan with a service that complements city-authorized taxis. Further, these findings suggest that, although New York’s standard taxi model serves the needs of many residents, ride-sharing is expanding the range of available for-hire vehicle service—thereby reducing inequities in service availability in NYC’s transportation market. The beneficiaries include residents of neighborhoods that were previously underserved by available options.



ENDNOTES

1. See <http://www.bloomberg.com/news/articles/2015-07-23/uber-s-political-victory-in-new-york-by-the-numbers>.
2. See http://www.nyc.gov/html/tlc/downloads/pdf/2014_taxicab_fact_book.pdf.
3. See <http://www.census.gov/population/www/documentation/twps0027/tab16.txt>; and <http://quickfacts.census.gov/qfd/states/36/3651000.html>.
4. See http://www.nyc.gov/html/tlc/html/passenger/shl_passenger.shtml.
5. See http://www.nyc.gov/html/tlc/downloads/pdf/boro_taxi_market_study.pdf. “Even in the Boro Taxi Zone there are residents who are unable to find street hail service; 51% of passengers who wanted to but were unable to hail a legal taxi reported that problem in the Boro Taxi Zone.”
6. App-based ride-sharing firms, such as Uber, do not own the cars that their drivers use. Instead, they facilitate and maintain passenger-driver matching and payment processes.
7. See, e.g., <http://watchdog.org/226320/taxi-protest-uber>; and <http://mashable.com/2014/06/11/uber-protests-europe>.
8. See <https://newsroom.uber.com/2011/05/uber-nyc-launches-service>.
9. See <http://www.nydailynews.com/opinion/bill-de-blasio-fair-ride-new-yorkers-article-1.2296041>; [http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=2364032&GUID=38613BB6-5A68-416E-9C27-9F43E3C60372&Options=&Search](http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=2364032&GUID=38613BB6-5A68-416E-9C27-9F43E3C60372&Options=&Search;); and <http://legistar.council.nyc.gov/LegislationDetail.aspx?ID=2364031&GUID=87C7D249-891A-43BC-8127-6617FB856429&Options=&Search>.
10. See <http://nypost.com/2015/07/22/city-strikes-deal-with-uber-no-cap-on-drivers-during-study>. After initially opposing the release of some of its private-ride data, Uber agreed to share the data with NYC to facilitate the latter’s study.
11. Neither the Manhattan Institute nor this author received compensation from Uber to write this paper.
12. See <http://www.driveubernyc.com/vehicles/full-list>.
13. See also <http://fivethirtyeight.com/features/uber-is-serving-new-yorks-outer-boroughs-more-than-taxis-are>. Using NYC Uber ride data—secured via a Freedom of Information Act request—analysts at Fivethirtyeight.com compared all Uber trips, from April 2014 to September 2014, with those of yellow taxis and green taxis. They found that 22 percent of Uber’s NYC pickups were beyond Manhattan; for yellow-taxi and green-taxi pickups, the figure was 14 percent.
14. By narrowing Figure 3’s scrutiny to noncore Manhattan zip codes with one or more pickups per household, the author aims to focus his analysis on zip codes with a meaningful minimum level of UberX ridership.
15. Median household income figures are derived from the American Community Survey 5-year estimates and are in 2013 inflation-adjusted dollars. The collective median income for the 146 noncore Manhattan zip codes is computed from the individual zip codes’ median incomes.
16. Yellow-taxi drivers change shifts most often between 4 PM and 5 PM, reducing the availability of yellow taxis at the start of NYC’s evening rush hour by about 33 percent over noontime availability. See http://www.nyc.gov/html/tlc/downloads/pdf/2014_taxicab_fact_book.pdf. As Figure 4 indicates, the number of UberX pickups beginning at 4 PM (16h) rises sharply.
17. TLC defines rush hour as 8 AM–9 AM and 5 PM–6 PM. See http://www.nyc.gov/html/tlc/downloads/pdf/2014_taxicab_fact_book.pdf. This paper enlarges TLC’s definition by adding an hour on both ends: thus, 7 AM–10 AM and 4 PM–7 PM.

