Real-time info increased NYC bus ridership, researchers say

by Susan on March 10, 2015

A new study provides additional evidence that real-time information can increase transit ridership.

Researchers looked at bus ridership for MTA New York City Transit before and after the Bus Time real-time location system was introduced. They found a modest but measurable 2% jump in ridership, on average.

The research team — comprising Candace Brakewood (City College of New York), Gregory S. Macfarlane (Parsons Brinckerhoff), and Kari Watkins (Georgia Tech) — measured ridership from January 2011 through December 2013, when Bus Time was introduced in Staten Island, the Bronx, and Manhattan. MTA completed the citywide deployment in 2014.

Brakewood and her team compared before and after ridership on routes in the three boroughs. After controlling for everything from the Citi Bike launch to Hurricane Sandy, they concluded that real-time information contributed to about 118 new weekday trips on average — a 1.7% increase. The impacts were more noticeable on the more popular routes. Here, the researchers attributed a 2.3% increase in daily ridership to Bus Time, or 340 trips.

The team estimates that these additional trips generated about $400,000 per month in new fare revenue by December 2013. They qualify this estimate, however, saying that the figures are based on average fares and can vary depending on a number of factors, including the percentage of monthly passholders in the mix.

Brakewood’s findings are consistent with earlier research that demonstrated a 2% increase in Chicago Transit Authority ridership after the CTA Bus Tracker was introduced.