

MTA Bus Hourly Ridership Data

Overview

General Description

The Metropolitan Transportation Authority (MTA) is a public-benefit corporation responsible for public transportation in the state of New York serving 12 counties in southeastern New York, along with two counties in southwestern Connecticut under contract to the Connecticut Department of Transportation (CDOT). The MTA is the largest transportation network in North America.

Bus service within New York City is operated by MTA agencies New York City Transit (NYCT) and MTA Bus Company (MTABC).

This dataset provides bus ridership, compiled at the hourly level, by bus route, fare payment method (OMNY or MetroCard), and consolidated fare class (MetroCard – Fair Fare, MetroCard – Full Fare, MetroCard – Other, MetroCard – Senior & Disability, MetroCard – Students, MetroCard – Unlimited 30-Day, MetroCard – Unlimited 7-Day, OMNY – Full Fare, OMNY – Other, OMNY – Seniors & Disabilities). MetroCard – Fair Fare and OMNY data is only available following their introductions in 2019, with different kinds of OMNY cards being rolled out at different subsequent dates.

These ridership metrics are within 1% of ridership figures provided at [public MTA board meetings](#). These numbers differ slightly since the data subsequently incorporates additional budget reconciliation. Data is released daily and is subject to revision. You can learn more about OMNY, the contactless fare payment system for public transportation in the New York region at [omny.info](#).

Additional years of this dataset can be found by looking at the bus hourly tag on the [State Open Data portal](#).

This dataset was published during the first phase of the MTA's commitment to increasing transparency. We continually examine all our published and publishable data with a view to both providing datasets that can be effectively utilized by our customers and the public at large, and to providing regular, automated updates to these datasets efficiently and sustainably. Consequently, this dataset may be restructured and/or combined with other similar datasets in the future.

Data Collection Methodology

This dataset captures bus entries made using OMNY and MetroCard taps/swipes from either farebox data or from MetroCard Fare Collectors (MFCs) used by all Select Bus Service routes except for the S79 SBS, which uses farebox data. The data obtained from the MFCs is for the time of payment, not for the time of entry. MetroCard data is aggregated from on-premises MTA data servers, while OMNY data is provided by a third-party vendor named Cubic.

The farebox on each bus identifies the Location Code for MetroCard and the Destination Sign Code for OMNY. The Destination Sign Code corresponds to the head sign displaying the bus route, while the Location Code data corresponds to the route designation. For this data, the limited-stop version of a route has the same location of the route has the same location code as the local version. Some SBS routes have different routes, while others do not. Tables are used to connect the MetroCard and OMNY data with the bus route id.

Before being released this data undergoes substantial data cleaning: transactions are deduplicated, and MetroCard swipes and OMNY taps collected by some partner agencies (PATH, Westchester Bee-Line Bus, NICE Bus) are removed from the dataset.

The fare class categories consolidate the dozens of individual fare types into easier to understand categories. Over time, some fare types are discontinued, and other types are added. This table provides some examples of the most frequently used fare types that fall within each category.

Fare Class Category	Specific code
OMNY – Full Fare	Full Fare
OMNY – Seniors & Disability	Red-Senior
	Red-Disability
	Paratransit
	PT w/ PCA
	PCA
OMNY – Fair Fare	Fair Fare
OMNY – Students	DOE Student
OMNY – Other	Test-Free
	Limited Use

	CUNY Student
MetroCard – Full Fare	Full Fare
	Pre-Valued
	Pre-Valued Zero
	JFK Pre-Valued Jamaica
	Pre-Valued Express
	JFK Pre-Valued Howard Beach
MetroCard – Unlimited 30-Day	30-Day Unlimited
	30-Day Reduced Fare Media Unlimited
	30-Day Agency
	30-Day ADA Farecard Access System Unlimited
MetroCard – Unlimited 7-Day	7-Day Unlimited
	7-Day Reduced Fare Media Unlimited
	7-Day Express Bus Pass
	7-Day Agency
	7-Day ADA Farecard Access System Unlimited
MetroCard – Fair Fare	Fair Fare Value
	Fair Fare 30-Day
	Fair Fare 7-Day
MetroCard – Students	Student Free 3
	Student Free 3/VOS
	Student Free 4
	Student Free 4/VOS
	Special Student Pass
MetroCard – Other	Employee Restricted
	TransitCheck MetroCard Annual Card
	CB Annual MetroCard
	Two-Trip Agency
	CUNY ASAP 120-day
	Mail and Ride EasyPayExpress
	Employee Unrestricted

	Mail and Ride EasyPay Unlimited
	TransitCheck MetroCard
	AirTrain Full Fare
	RRC FareCard
	One-Trip Agency
	Employee Res Express
	Employee Res EX MTA
	Temporary Pass
MetroCard – Seniors & Disability	Senior Citizen
	Mail and Ride Senior Citizen
	Disabled
	Access-a-Ride Personal Care Attendant (Paratransit MetroCard)
	Reduced Fare Temporary
	Access-a-Ride No Personal Care Attendant (Paratransit MetroCard)
	Disabled ADA Farecard Access System Pay-Per-Ride
	Mail and Ride Autogate
	Mail and Ride Disabled

Statistical and Analytic Issues

Data is released to the Open Data portal daily. Bus data represents an undercount of true ridership for dates within two weeks of data posting date.

A fair number of MetroCard transactions (~10%) are recorded late due to delays in reading MetroCard data from bus ticketing machines. This late-arriving data is incorporated as it is made available, and thus historical data in this dataset is subject to adjustments.

Since the data only captures bus entries using OMNY and MetroCard, certain segments of ridership are not captured in the data. This includes people who evade the fare, the approximately 6 to 8% of daily trips paid with cash, trips made by riders using UniTickets, who flash their passes to the bus operator, and by children under 44 inches tall on local buses, and under 2 years old on express buses, who do not pay when accompanying an adult. Data for the Q52 SBS and Q53 SBS are reported together, and since

the Q70 LaGuardiaLink SBS route is free, no ridership is recorded for this route in this dataset. Data is also not available for the bus routes (Bx18A/B, S46/s96, B60, M116, Q4) that were part of the fare-free pilot between September 2023 and August 2024. In addition, when the farebox is not working and the bus operator waves passengers on there is also no ridership data.

The data does not capture transfers between the L train at the Canarsie-Rockaway Parkway station and the B42 or the westbound B6 and B82 local since these transfers are made within fare control and can be made without using MetroCard or OMNY.

The linking of fare payments to bus route is reliant on a bus driver selecting the correct sign code when starting the bus route. Occasionally, bus operators initially display an incorrect sign code when starting a bus. Since ridership for each bus route is obtained by connecting MetroCard swipes and OMNY tap data with the sign code being displayed on the bus, this means that sometimes boardings are recorded as happening on bus routes that are no longer used, like the B99, for which no fare is paid, like the Q70, or with other sign codes, like “NIS” for a not-in-service code or “LG00”, one of a small set of test sign codes. When no sign code is available these swipes and taps are captured under “Unknown.”

Limitations of Data Use

There are no limitations on the data at this time.

Release Notes

Version 1.0.0 release note instituted with the addition of OMNY – Students as a fare class category
(10/15/2024)