MTA NYCT Subway Elevator and Escalator Availability 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.

Subway service within New York City is operated by MTA New York City Transit (NYCT). NYCT's Division of Elevators and Escalators (E&E) is responsible for inspecting, maintaining, and repairing escalators and elevators in the subway system.

Elevator and Escalator availability is defined as the percentage of time that elevators or escalators are operational. Availability for a given elevator or escalator asset and time period is measured by determining the percentage of a specific time period the asset is available for customer use. All service outages, regardless of cause, count as downtime and are calculated toward availability; however, units that are out of service for capital rehabilitation, as well as a few other service outages that are out of E&E control, are excluded from availability calculations.

This dataset provides availability by month and elevator or escalator asset, calculated for the AM peak period (6 a.m. to 10 a.m.), PM peak period (3 p.m. to 7 p.m.), and 24 hours, and the time in hours that each escalator or elevator is available in each of these periods, and the total number of hours during each period, excluding capital outages. The dataset also includes counts of scheduled and non-scheduled outages, per asset, the number of entrapments resulting in a service outage, the amount of time in months that has passed since the last major improvement, and station and station complex names and master reference numbers (MRNs) and boroughs where elevators or escalators are located. The data includes both assets that are owned, operated, and maintained by the MTA, as well as assets that are owned, operated, and maintained by third parties. A "X" at the end of the equipment code indicates that the elevator or escalator is operated by a party external to the MTA.

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

Elevator and escalator outages are identified primarily via remote monitoring by LiftNet, which flows into NYCT's maintenance system-Enterprise Asset Management (EAM), before being extracted. For some equipment, outage information is reported by customers or MTA employees, and recorded. Availability is then computed monthly by asset.

Outage Unavailable

Outage codes used to determine unavailable hours. These are hours that would not be accounted towards the availability of elevators and escalators.

Outage Code	Outage Description	Planned
CM	Cancel Maintenance	N/A
MSC	Maintenance While Station is Closed	YES
OPN	Bridge Opening for Marine Traffic	N/A
RCC	Capital / Contract Rehab on the Machine	N/A
REV	Reversal	YES
RTA	Transit Authority Rehab on the Machine	N/A
SCC	Capital - Contract Rehab on Station - Machine OK	N/A
STA	Transit Authority Rehab on Station, Machine OK	N/A
UPO	Upcoming Outage	N/A
WRP	Warranty Repair by Rehabilitation / Replacement Contractor	NO

Outage Down

Outage codes used to determine equipment outage hours. These are hours that are calculated towards the outage of elevators and escalators.

Outage Code	Outage Description	Planned
ACC	Accident	NO
AP	Access and Protection	YES
BRP	Breakdown Repair	NO
CCR	Critical Component Replacement	YES
CLN	Cleaning	YES
ENT	Entrapment, Passenger Trapped	NO
ENV	Entrapment, Vandalism	NO
EUF	Entrapment Unfounded, Operator Error	NO
EWC	Extreme Weather Conditions	NO
FIR	Fire Originated from the Machine	NO
FNM	Originating from Source other than Machine	NO
INS	Inspection	YES
IRP	Inspection Repair	NO
LTR	Long Term Repair	NO
MRP	Maintenance Repair	YES
PM	Preventive Maintenance	YES
PNM	Power Failure due to ConEd or 3rd Rail	NO

POW	Power - Fuse, Overload, Reverse Phase, etc	NO
SOC	Scheduled Oil Change	YES
TAN	Tandem Escalator Outage	NO
VAN	Vandalism, Repair Not Required	NO
VNR	Vandalism, Corrected by Stations	NO
VRP	Repair on Machine due to Vandalism	NO
WD	Damaged by flood, leaks or other water contact	NO
WRK	Wreck	NO

Statistical and Analytic Issues
If an elevator is out of service for capital rehabilitation, it is not included in the availability statistics.

Most third-party elevators are not remotely monitored by NYCT's Lift-Net. As such, there are sometimes issues with data for these elevators, including the accuracy of outage codes, and the availability percentage.

The number of entrapments stated are also included within the non-scheduled outages count.

For the purposes of 24-hour availability, only "outage unavailable" codes described above are excluded from the total (e.g., equipment availability at entrances that close for a portion of the day is still calculated around the clock."

Data back to 2015 was replaced as part of the August 2023 update to this dataset. About 1 to 2 percent of the equipment-months of availability will differ from the previously published data. The current dataset resolves issues related to equipment commissioning dates and capital closures.

Limitations of Data Use
There are no limitations on the data at this time.