MTA Subway Major Incidents
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).

Major Incidents are unplanned incidents that delay 50 or more trains. Such events cause the most disruption to customers. Major incidents are separated into six categories:

- Track: Track fires, broken rails, switch trouble, and other track conditions.
- Signals: Signal and track circuit failures, and other equipment and transmission problems related to signals, both for conventional color-light signals and for new technology Communications-Based Train Control (CBTC) signals.
- Persons on Trackbed/Police/Medical: Police and/or medical activity due to sick customers, vandalism, assault, persons struck by trains, unauthorized persons on tracks, and suspicious packages.
- Stations and Structure: Obstructions and other structural problems, such as damage to tunnels or debris on the right-of-way; electrical problems such as defective wires, cables, and power systems that aren't on trains, including traction power to run the trains.
- Subway Car: Broken doors, seats, windows, lights, brakes, and other problems caused by defective trains, such as power or air conditioning failures.
- Other: Inclement weather, water conditions, external power supply failures, as well as drawbridge openings and other external conditions, such as unstable nearby buildings, nearby fires, civil demonstrations, and/or parades.

For each month and subway line, the dataset includes the division of the route (A Division or B Division), the day type (weekday or weekend), the delay category, and the count of major incidents. The data is also calculated at the systemwide level.

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

Data on train arrivals at terminals, train abandonments, train cancellations, and when trains skip regular stops is manually entered by train dispatchers into the Intergrated Train Register Activity Console (I-TRAC) digital dispatching tool. The number of trains that are recorded as arriving at terminal locations more than five minutes late or recorded as missing any scheduled stops is summed up.

Every delay is assigned by a dispatcher to a specific incident, for delay analysis purposes. Each incident, in turn, has an assigned cause category and subcategory. Thus, every delay ends up assigned to a specific cause category and subcategory.

Statistical and Analytic Issues

The assigning of delays to incidents, and incidents to incident causes, depends upon the subjective judgement of the dispatcher. Often, a single subway line can be affected by multiple incidents at the same time, making it difficult to neatly assign a specific delayed train to a single incident. Furthermore, incidents can sometimes have multiple causes, making it difficult to neatly categorize incidents, and the delays assigned to them, by cause. Thus, analysts looking at delay data should look at delay categories as the MTA's "best guess" of what the delay cause was, nothing more.

To further its analysis of subway delays and their causes, the MTA will often retrospectively reassign delays to incidents, and incidents to causes, several weeks after the delays took place. As a result, whenever a new month of data is released, incident totals in the prior month or two may also shift slightly.

Holidays are assigned to the Weekday/Weekend day type based on what schedule ran.

Data for March 2020 is based on actual delays for March 1 to March 22 and data for April 2020 is based on actual delays from April 14 to April 30 since the Essential Service Plan implemented upon the outbreak of the COVID-19 pandemic meant that the electronic systems loaded with the schedules did

not properly reflect the service or schedules that were operated after March 22. Data in April was provided after the Essential Service schedules were phased in, from April 14.

To maintain comparisons with historical data, for March 2020, the totals for the 15 weekdays and 7 weekend days with data were factored up using a daily average to the projected total for the 22 weekdays and 9 weekend days in March. For April 2020, the totals for the 13 weekdays and 4 weekend days with data were factored up using a daily average to the projected totals for the 22 weekdays and 8 weekend days in April. The detail of delays by type and major incidents categories was not provided for March or April 2020. Additionally, there was no projection for weekend incidents for March 2020, though they remained at zero through March 22.

The surge in COVID cases due to the Omicron variant required service and schedule changes on multiple lines between December 29, 2021 and January 24, 2022, and performance was measured against the schedule operated each day.

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

Release Notes
Version 1.0.0 release notes instituted with new pipeline and systemwide rows removed (11/13/2024)