

**Metadata format: ISO 19139****Subway Routes, New York NY, January 2017****ISO 19139 metadata content**

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**Resource Identification Information**

## CITATION

TITLE Subway Routes, New York NY, January 2017

PUBLICATION DATE 2017-01-31

EDITION jan2017

PRESENTATION FORMAT mapDigital

## SERIES

NAME NYC Mass Transit Spatial Layers

## RESPONSIBLE PARTY - POINTOFCONTACT

ORGANIZATION'S NAME Newman Library, Baruch CUNY

CONTACT'S POSITION Geospatial Data Librarian

## CONTACT INFORMATION

## ADDRESS

DELIVERY POINT 151 E 25th St Box H-0520

DELIVERY POINT Newman Library, Baruch CUNY

CITY New York

ADMINISTRATIVE AREA NY

POSTAL CODE 10010

COUNTRY UNITED STATES

THEMES OR CATEGORIES OF THE RESOURCE structure, transportation

## PLACE KEYWORDS

KEYWORDS City of New York, 2395220, Borough of Bronx, 978756, Borough of Brooklyn, 978759, Borough of Manhattan, 979190, Borough of Queens, 979404, Borough of Staten Island, 979522

## THESAURUS

TITLE Geographic Names Information Service (GNIS)

ALTERNATE TITLES ANSI INCITTS 446:2008

PUBLICATION DATE 2008-01-01

## PLACE KEYWORDS

KEYWORDS Bronx County, 36005, Kings County, 36047, New York County, 36061, Queens County, 36081, Richmond County, 36085

## THESAURUS

TITLE US Census ANSI/FIPS

ALTERNATE TITLES ANSI INCITTS 38:2009 (Formerly FIPS 5-2) &amp; ANSI INCITTS 31:2009 (Formerly FIPS 6-4)

PUBLICATION DATE 2009-01-01

## TEMPORAL KEYWORDS

KEYWORDS 2017

## THEME KEYWORDS

KEYWORDS Subways, Local transit, Commuting, New York City Transit Authority, Transportation

## THESAURUS

TITLE Library of Congress Subject Headings (LCSH)

PUBLICATION DATE 2015-02-17

## DESCRIPTIVE KEYWORDS

KEYWORDS Downloadable Data

THESAURUS ArcIMS Metadata Service Content Types

## ABSTRACT

This line layer was created from the GTFS data feeds from the Metropolitan Transportation Authority (MTA) to represent the MTA NYC Transit Subway routes. A python script was written to take the data files as input, process and save them as a spatial layer in the local state plane coordinate reference system. Lines in this layer represent individual subway routes that follow physical track locations; they were generalized from the GTFS format where lines depicted individual services. Each line represents the route that a specific train takes during normal weekday rush hour service. The unique ID is route\_id, a field created by the MTA that uses the familiar letter or number designation for trains, with distinct ids for each of the three shuttle (S) trains. This layer was created as part of the NYC Mass Transit Spatial Layers series, and is updated biannually to account for changes in the transit system.

## PURPOSE

This dataset is intended for researchers, policy makers, students, and educators for basic geographic analysis and mapping purposes. It was created by the GIS Lab at the Newman Library at Baruch College CUNY as part of the NYC Mass Transit Spatial Layers series, so that members of the public could have access to well-documented and readily-usable GIS layers of NYC mass transit features.

DATASET LANGUAGE English

DATASET CHARACTER SET utf8

STATUS completed

## MAINTENANCE

UPDATE FREQUENCY biannually

## RESOURCE CONSTRAINTS

## CONSTRAINTS

## LIMITATIONS OF USE

Disclaimer: Every effort was made to insure that the data, which was compiled from public sources, was processed accurately. The creator, Baruch College, and CUNY disclaim any liability for errors, inaccuracies, or omissions that may be contained therein or for any damages that may arise from the foregoing. Users should independently verify the accuracy of the data for their purposes. The data is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International

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## RESOURCE CONSTRAINTS

## LEGAL CONSTRAINTS

ACCESS CONSTRAINTS licenseUnrestricted

USE CONSTRAINTS license

SPATIAL REPRESENTATION TYPE vector

PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.1.4959

## EXTENT

## EXTENT DESCRIPTION

City of New York

## GEOGRAPHIC EXTENT

## BOUNDING RECTANGLE

EXTENT CONTAINS THE RESOURCE true

WEST LONGITUDE -74.25344

EAST LONGITUDE -73.754305

NORTH LATITUDE 40.903222

SOUTH LATITUDE 40.512764

## TEMPORAL EXTENT

BEGINNING DATE 2017-01-12 00:00:00

ENDING DATE

INDETERMINATE TIME unknown

## EXTENT

## GEOGRAPHIC EXTENT

## BOUNDING RECTANGLE

EXTENT CONTAINS THE RESOURCE true

WEST LONGITUDE -74.25344

EAST LONGITUDE -73.754305

NORTH LATITUDE 40.903222

SOUTH LATITUDE 40.512764

## SUPPLEMENTAL INFORMATION

The field route\_shor contains the common letters and numbers used to identify trains on official subway maps. The express services for the J (Z train) and 6 and 7 (diamond trains) are not stored as individual lines in this file, but are consolidated with their local lines as they share the same track.

## POINT OF CONTACT - POINTOFCONTACT

ORGANIZATION'S NAME Newman Library, Baruch CUNY

CONTACT'S POSITION Geospatial Data Librarian

## CONTACT INFORMATION

## ADDRESS

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COUNTRY UNITED STATES

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## Spatial Representation - Vector

LEVEL OF TOPOLOGY FOR THIS DATASET geometryOnly

GEOMETRIC OBJECTS

OBJECT TYPE composite

OBJECT COUNT 25

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## Reference System Information

REFERENCE SYSTEM IDENTIFIER

VALUE 2263

CODESPACE EPSG

VERSION 10.2

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## Data Quality Information

SCOPE OF QUALITY INFORMATION

RESOURCE LEVEL dataset

LINEAGE

LINEAGE STATEMENT

This line layer was created using the data feeds from the Metropolitan Transportation Authority (MTA). The MTA provides text files that contain route information in a General Transit Feed Specification (GTFS) format, and are geographically referenced so they are able to be plotted. Python scripts were written to take the text files as input, process them and save them as a spatial layer. The text file used for geometry creation is 'shapes.txt' and it provides geographically referenced data for the routes in the form of points. The script creates geometry object out of the individual points provided for the route, and then creates a line geometry object out of the points grouped by the common id of the segment that they belong to. Then it joins created geometry object with data from text files, 'trips.txt' and 'routes.txt', which contain additional relevant information provided by the MTA. Based on common attribute, individual rail services for different times and days of the week, are dissolved to create lines that represented an individual route. Certain segments, which represented late night or weekend service, on the 2,4,5,E, and N trains were removed. Attribute columns that were blank, redundant, or that represented information that was only relevant to specific services and not to individual routes were removed. A column called group was added; it groups individual lines into their trunk lines. The final layer was reprojected from NAD 83 to NY State Plane

Long Island in feet and saved in a shapefile format. The unique ID is route\_id, a field created by the MTA that uses the familiar letter or number designation for trains, with distinct ids for each of the three shuttle (S) trains. In January 2017, MTA's GTFS feeds didn't contain the data for the recently-relaunched W line and for rerouted Q line. These lines were digitized manually using MTA's most recent maps as a reference. This layer was created as part of the NYC Mass Transit Spatial Layers series, and is updated biannually to account for changes in the transit system.

## SOURCE DATA

LEVEL OF THE SOURCE DATA Metropolitan Transportation Authority

## SOURCE CITATION

TITLE MTA NYC Transit Shapes, Trips and Routes Files

PUBLICATION DATE 2017-01-12

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## Distribution Information

## DISTRIBUTOR

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ORGANIZATION'S NAME Newman Library, Baruch CUNY

CONTACT'S POSITION Geospatial Data Librarian

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COUNTRY UNITED STATES

## FORMAT

NAME Shapefile

## VERSION

NIL REASON missing

## TRANSFER OPTIONS

TRANSFER SIZE 0.222

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## Metadata Information

LAST UPDATE 2017-02-10

## MAINTENANCE

UPDATE FREQUENCY biannually

MAINTENANCE NOTES This metadata record was updated by Anastasia Clark in January 2017

## METADATA CONSTRAINTS

## CONSTRAINTS

LIMITATIONS OF USE

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## METADATA CONSTRAINTS

## LEGAL CONSTRAINTS

USE CONSTRAINTS license

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SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset

METADATA LANGUAGE English

METADATA CHARACTER SET utf8

NAME OF THE METADATA STANDARD USED NAP - Metadata

VERSION OF THE METADATA STANDARD 1.2

METADATA IDENTIFIER 6BDC71ED-AFBC-4D19-9901-F0184188FB34

URI OF THE DATA DESCRIBED BY THE METADATA

<https://www.baruch.cuny.edu/confluence/display/geoportal/NYC+Mass+Transit+Spatial+Layers>[Back to Top](#)