Metadata format: ISO 19139

Subway Routes, New York NY, May 2016

ISO 19139 metadata content

Resource Identification Information

CITATION
TITLE Subway Routes, New York NY, May 2016

PUBLICATION DATE 2016-05-19

EDITION may2016
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 Newman Library, Baruch CUNY
DELIVERY POINT 151 E 25th St Box H-0520
CITY New York
ADMINISTRATIVE AREA NY
POSTAL CODE 10010
COUNTRY UNITED STATES

THEMES OR CATEGORIES OF THE RESOURCE transportation, structure

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) & ANSI INCITTS 31:2009 (Formerly FIPS 6-4)

PUBLICATION DATE 2009-01-01

TEMPORAL KEYWORDS
KEYWORDS 2016

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 and plot 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 and 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

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 10.2.0.3348

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 2016-05-02 00:00:00
  - ENDING DATE
    - INDETERMINATE TIME unknown

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
    - DELIVERY POINT Newman Library, Baruch CUNY
    - DELIVERY POINT 151 E 25th St Box H-0520
    - CITY New York
    - ADMINISTRATIVE AREA NY
    - POSTAL CODE 10010
    - COUNTRY UNITED STATES

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Spatial Representation - Vector

LEVEL OF TOPOLOGY FOR THIS DATASET geometryOnly
GEOMETRIC OBJECTS
OBJECT TYPE composite
OBJECT COUNT 24

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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 and plot and save them as a spatial layer. The text file used for plotting is 'shapes.txt' and provides geographically referenced data for the routes in the form of points. The first script plots these points and creates a layer file, which is then converted to a polyline layer and saved as a shapefile. The second script joins the new line shapefile with two text files, 'trips.txt' and 'routes.txt', which contain additional relevant information provided by the MTA. The 'routes.txt' file was modified to exclude the routes_desc field, as this field consistently exceeded the maximum allowable character count for a shapefile. This field was removed and a new text file called 'notes' was created which includes the route description information.

After the routes were plotted from their native GTFS format, the lines represented individual subway services for different times and days of the week. Additional processing was done to simplify these lines; the dissolve tool was used to create lines that represented an individual subway route during normal weekday and rush hour service. Manual edits were made on the 2,4,5,E, and N trains to remove line segments that represented late night or weekend service. Attribute columns that were blank, redundant, or that represented information that was only relevant to specific services and not to individual routes were removed. Some manual editing was performed to extend the 1 train so that it terminates at the South Ferry Loop station (in the data files the line fell short of intersecting with the station). Some manual edits were performed to standardize attribute names, and a column called group was added that groups individual lines into their trunk lines. The final layer was reprojected from NAD 83 to NY State Plane Long

Island in feet. 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.

SOURCE DATA
LEVEL OF THE SOURCE DATA Metropolitan Transportation Authority

SOURCE CITATION
TITLE MTA NYC Transit Shapes, Trips and Routes Files

PUBLICATION DATE 2016-05-02

SOURCE DATA
LEVEL OF THE SOURCE DATA US Census 2014 TIGER Line Shapefiles

SOURCE CITATION
TITLE US Census 2014 TIGER Line Shapefiles

PUBLICATION DATE 2014-08-19

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Distribution Information

DISTRIBUTOR
DISTRIBUTOR INFORMATION - POINTOFCONTACT
ORGANIZATION'S NAME Newman Library, Baruch CUNY
CONTACT'S POSITION Geospatial Data Librarian

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ADDRESS
DELIVERY POINT Newman Library, Baruch CUNY
DELIVERY POINT 151 E 25th St Box H-0520
CITY New York
ADMINISTRATIVE AREA NY
POSTAL CODE 10010
COUNTRY UNITED STATES

FORMAT
NAME Shapefile
VERSION
NIL REASON missing

TRANSFER OPTIONS
TRANSFER SIZE 0.222

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Metadata Information

LAST UPDATE 2016-05-26
MAINTENANCE
UPDATE FREQUENCY biannually

MAINTENANCE NOTES This metadata record was updated by Janine Billadello in May 2016.

METADATA CONSTRAINTS
CONSTRAINTS
LIMITATIONS OF USE
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METADATA CONSTRAINTS
LEGAL CONSTRAINTS
ACCESS CONSTRAINTS licenseUnrestricted

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

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