

National Neighborhood Data Archive (NaNDA): Public Transit Stops by Census Tract and ZIP Code Tabulation Area, United States, 2024



Overview and Data Dictionary

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Dataset Overview

Description

This dataset lists the number of public transit stops per United States census tract or ZIP Code Tabulation Area (ZCTA) based on data from the National Transit Map (NTM). Each observation represents the count and density of transit stops within a census tract or ZCTA, compiled on January 13, 2024 from the Bureau of Transportation Statistics (BTS) (U.S. Department of Transportation. Bureau of Transportation Statistics., 2024). Density is measured both by population density (per 1000 people) and area (per square mile).

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Data Sources

Source data were obtained from the NTM Stops dataset within the Geospatial data at the Bureau of Transportation Statistics Open Data Catalog (Bureau of Transportation Statistics, 2024a), which was compiled on January 13, 2024. Census tract boundaries were obtained from the 2020 TIGER/Line census tract shapefiles (United States Census Bureau, 2021a). ZIP code tabulation area boundaries were obtained from the 2020 Tiger/Line ZCTA shapefiles (United States Census Bureau, 2021b).

Coverage

The dataset contains one observation per Census Tract or ZCTA in the fifty United States including Alaska, Hawaii, US island territories.

Methodology

In previous versions (2016-2018) of NaNDA's public transit stops datasets (Clarke et al., 2023), source data was voluntarily reported to the NTM by regional transit authorities, resulting in a fair amount of missing data. Beginning in Report Year 2023, the Federal Transit Administration (FTA) began requiring National Transit Database (NTD) Reporters to report and submit General Transit Feed Specification (GTFS) data for their fixed route service to the NTM (Bureau of Transportation Statistics, 2024b, 2024c).

Public Transit Stop counts were aggregated by researchers to the census tract and ZCTA areas.

Usage Notes

Zip Codes and ZIP Code Tabulation Areas

Users should be aware that ZCTAs are not equivalent to ZIP codes. ZIP codes are linear mail delivery routes created by the US Postal Service. ZIP code tabulation areas are spatial features consisting of census blocks grouped by the predominant ZIP code found on the block (United States Census Bureau, 2023)

In some cases, a location's address is not the same as its ZCTA. For example, some ZIP codes represent single-point addresses such as large post offices or office buildings. Also, the ZIP code for an address may not match its ZCTA if the ZIP code is not the most common ZIP code on the block. See the [Census Bureau's ZCTA overview](#) for more

information on how ZCTA boundaries are calculated (United States Census Bureau, 2023).

Users wanting to combine this dataset with ZIP code geocoded data must use a ZIP code to ZCTA crosswalk. Such a crosswalk is available on the [UDS Mapper website](#) (John Snow, Inc, 2023). Sample code for merging the UDS Mapper crosswalk with NaNDA datasets is available in the ICPSR Linkage Library (Chenoweth & Khan, 2021).

Census Tract Variables

| Variable | Label |
|----------------------|--|
| tract_fips20 | Census Tract 2020 FIPS Code |
| census_tract_area_20 | Census land area, square miles |
| tot_pop_2020 | Total population |
| count_ntm_stops | Count of transit stops reported to National Transit Map as of 1/2023 |
| stops_per_capita | Transit stops per 1000 people |
| stops_per_sqmile | Transit stops per square mile |

ZCTA Variables

| Variable | Label |
|--------------|----------------------------|
| zcta20 | Census ZCTA 2020 FIPS Code |
| ZCTA_area20 | ZCTA area, square miles |
| tot_pop_2020 | Total population |

National Neighborhood Data Archive (NaNDA)
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| stops_per_capita | Transit stops per 1000 people |
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National Neighborhood Data Archive (NaNDA)
Public Transit Stops by Census Tract and ZIP Code Tabulation Area United States, 2024

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