

Data Management Plan (DMP) for National Highway Freight Network (NHFN) 2024-Present Dataset

U.S. Department of Transportation (DOT)
Federal Highway Administration (FHWA),
U.S. Department of Transportation (USDOT)
Bureau of Transportation Statistics (BTS)
2025-06-09

Persistent link: <https://doi.org/10.21949/1403518>

Recommended Citation:

U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA); U.S. Department of Transportation (USDOT), Bureau of Transportation Statistics (BTS) [distributor]. National Highway Freight Network (NHFN) 2024-Present [datasets]. <https://doi.org/10.21949/1403518>.

Change log:

2025-06-09: Initial DMP written.

2025-12-11: DOI added.

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0. Dataset and Contact Information

Title of Dataset: National Highway Freight Network (NHFN) 2024-Present Dataset

URL: <https://doi.org/10.21949/1403518>

This is an ☒ initial DMP or a ☐ revised DMP.

Organizational Contact Information

Institution: U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA)

Address: 1200 New Jersey Ave SE, Washington D.C. 20590

Contact: ExecSecretariat.FHWA@dot.gov

Data Distributor Contact Information

Name: National Transportation Atlas Database (NTAD)

Institution: U.S. Department of Transportation, Bureau of Transportation Statistics (BTS)

Address: 1200 New Jersey Ave. SE, Washington D.C. 20590

Email: ntad@dot.gov

1. Data Description:

The National Highway Freight Network (NHFN) 2024-Present dataset is from the Federal Highway Administration (FHWA), and is part of the U.S. Department of Transportation (USDOT)/Bureau of Transportation Statistics' (BTS's) National Transportation Atlas Database (NTAD). Congress established a new National Highway Freight Program (NHFP) in 23 U.S.C. 167 to improve the efficient movement of freight on the National Highway Freight Network (NHFN) and support several goals. The law required the FHWA Administrator to strategically direct Federal resources and policies toward improved performance of the network. The NHFP provides formula funding apportioned annually to States, for use on the NHFN. The definition of the NHFN is established under 23 U.S.C. 167(c) and consists of four separate highway network components: the PHFS; Critical Rural Freight Corridors (CRFCs); Critical Urban Freight Corridors (CUFCs); and those portions of the Interstate System that are not part of the PHFS.

Primary Highway Freight System (PHFS): This is a network of highways identified as the most critical highway portions of the U.S. freight transportation system determined by measurable and objective national data. The network consists of 41,800 centerlines miles, including 38,014 centerline miles of Interstate and 3,785 centerline miles of non-Interstate roads.

Other Interstate portions not on the PHFS: These highways consist of the remaining portion of Interstate roads not included in the PHFS. These routes provide important continuity and access to freight transportation facilities. These portions amount to an estimated 10,265 centerline miles of Interstate, nationwide, and will fluctuate with additions and deletions to the Interstate Highway System.

Critical Rural Freight Corridors (CRFCs): These are public roads not in an urbanized area which provide access and connection to the PHFS and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities. Nationwide, there are 5,389 centerline miles designated as CRFCs as of January 27, 2023. CRFCs are not included in GIS data base.

Critical Urban Freight Corridors (CUFCs): These are public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities. Nationwide, there are 2,656 centerline miles designated as CUFC as of January 27, 2023. CUFCs are not included in GIS data base.

2. Standards Employed:

The data files collected here are saved in the ubiquitous and common geospatial file geodatabase (.gdb) formats. As the files created for this ingest were migrations from the original format in a SQL geodatabase, each data file name includes a date stamp indicating when the data in the shapefile was from.

Documentation will include this data management plan, and the metadata and readme files created in 2025.

Documentation will also include the shapefiles, data dictionary, and relevant supporting files created alongside the data from 1995. A DCAT-US vs. 1.1 .json metadata file will be created to describe the archival location of this data, and that .json file will be uploaded to data.gov and transportation.data.gov

Necessary software tools: The file formats found in the zip files include: .txt, file geodatabases (.gdb), and .pdf files.

- File geodatabases (.gdb) can be opened with any Esri GIS software program <https://www.esri.com/en-us/home/>.

- The txt is a common text file, which can be opened with a basic text editor. The most common software used to open .txt files are Microsoft Windows Notepad, Sublime Text, Atom, and TextEdit (for more information on .txt files and software, please visit <https://www.file-extensions.org/txt-file-extension>)

- The pdf file format was developed by Adobe Systems and represents two-dimensional documents in a

device-independent and resolution-independent format. There are PDF readers available on many platforms, such as Xpdf, Foxit, and Adobe's own Adobe Acrobat Reader. PDF readers/viewers or online services for basic functions are generally free (for more information on .pdf files and software, please visit <https://www.file-extensions.org/pdf-file-extension>).

3. Access Policies:

These data files are in the public domain, and can be shared without restriction. The data files contain no sensitive information.

4. Re-Use, Redistribution, and Derivative Products Policies:

These data are managed by the Bureau of Transportation Statistics. The data are in the public domain, and may be re-used without restriction.

Citation of the data is appreciated. Please use the following recommended citation:

U.S. Department of Transportation (DOT), Federal Highway Administration (FHWA); U.S. Department of Transportation, Bureau of Transportation Statistics (BTS) [distributor]. National Highway Freight Network (NHFN) 2024-Present [datasets]. <https://doi.org/10.21949/1403518>

5. Archiving and Preservation Plans:

The dataset will be archived in the National Transportation Library Repository and Open Science Access Portal (ROSA P). Prior to archiving, the data are stored on the secured BTS networks and drives, which are backed up nightly. The US DOT systems are secured from outside users and backed up daily.

Files in ROSA P are backed up in NTL drives at US DOT, daily; at the Centers for Disease Control, the repository managing facility, daily; and in Amazon Web Service Cloud servers in Virginia and Oregon daily.

The dataset will be retained in perpetuity.

NTL staff will mint persistent Digital Object Identifiers (DOIs) for each dataset stored in ROSA P. These DOIs will be associated with dataset documentation as soon as they become available for use.

The DOIs associated with this dataset include: <https://doi.org/10.21949/1403518>

The assigned DOI resolves to the repository landing page for the “National Highway Freight Network (NHFN) 2024-Present” dataset, so that users may locate associated metadata and supporting files.

ROSA P meets all the criteria outlined on the “Guidelines for Evaluating Repositories for Conformance with the DOT Public Access Plan” page: <https://ntl.bts.gov/publicaccess/evaluatingrepositories.html>

6. Policies Affecting this Data Management Plan

This document was created to meet the requirements enumerated in the U.S. Department of Transportation's Plan to Increase Public Access to the Results of Federally-Funded Scientific Research' Version 1.1 << <https://doi.org/10.21949/1520559> >> and guidelines suggested by the DOT Public Access website << <https://doi.org/10.21949/1503647> >>, in effect and current as of December 03, 2020.