***Identification Information:***

***Citation:***

***Citation Information:***

***Originator:***Federal Highway Administration (FHWA)

***Publication Date:***04.27.2022

***Title:***National Highway Freight Network (NHFN)

***Geospatial Data Presentation Form:***vector digital data

***Publication Information:***

***Publication Place:***Washington DC

***Publisher:***Federal Highway Administration (FHWA)

***Publication Information:***

***Publication Place:***1200 New Jersey Ave. SE, Washington, DC, 20590

***Publisher:***Office of Freight Management and Operation

***Online Linkage:***<https://ops.fhwa.dot.gov/freight/infrastructure/nfn/index.htm>

***Online Linkage:***

***Larger Work Citation:***

***Citation Information:***

***Originator*** Office of Freight Management and Operation

***Publication Date:***20220427

***Title:***National Highway Freight Network (NHFN)

***Geospatial Data Presentation Form:***vector digital data

***Publication Information:***

***Publication Place:***Washington, DC

***Publisher:***Office of Freight Management and Operation

***Description:***

***Abstract:*** 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 41,799 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 9,234 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 5,373 centerline miles designated as CRFCs as of June 10, 2022. 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 2,598 centerline miles designated as CUFC as of June 10, 2022. CUFCs are not included in GIS data base.

***Purpose:***The primary purpose of this geospatial data set is to serve the FHWA needs in highway freight planning, policy analysis, visualization of the NHFN database and network analysis.

***Time Period of Content:***

***Time Period Information:***

***Single Date/Time:***

***Calendar Date:***20220427

***Currentness Reference:***publication date

***Status:***

***Progress:***In work

***Maintenance and Update Frequency:***As needed

***Spatial Domain:***

***Bounding Coordinates:***

***West Bounding Coordinate:***-159.395785

***East Bounding Coordinate:***-65.633045

***North Bounding Coordinate:***64.860120

***South Bounding Coordinate:***17.969393

***Keywords:***

***Theme:***

***Theme Keyword Thesaurus:***Freight

***Theme Keyword:***Analysis

***Theme Keyword:***Network

***Theme Keyword:***Highways

***Theme Keyword:***Transportation

***Theme Keyword:*** NHFN

***Theme:***

***Theme Keyword Thesaurus:***none

***Theme Keyword:***transportation

***Theme:***

***Theme Keyword Thesaurus:***None

***Theme Keyword:***Network

***Theme Keyword:***Highways

***Theme:***

***Theme Keyword Thesaurus:***ISO 19115 Topic Categories

***Theme Keyword:***transportation

***Place:***

***Place Keyword Thesaurus:***US

***Place Keyword:***United States

***Place Keyword:***USA

***Stratum:***

***Stratum Keyword Thesaurus:***None

***Stratum Keyword:***ground

***Temporal:***

***Temporal Keyword Thesaurus:***None

***Temporal Keyword:***2019

***Temporal Keyword:***2022

***Access Constraints:***None

***Use Constraints:***The NHFN Version 2022.04.27 database, or any portion thereof, can be freely distributed as long as this metadata entry is included with each distribution. The original metadata entry cannot be modified or deleted from any data transfer.

***Point of Contact:***

***Contact Information:***

***Contact Organization Primary:***

***Contact Organization:***Office of Freight Management and Operation

***Contact Person:***Birat Pandey

***Contact Position:***Geospatial Information Systems

***Contact Address:***

***Address Type:***unknown

***Address:***

***City:***

***State or Province:***

***Postal Code:***20590

***Contact Voice Telephone:***

***Contact Electronic Mail Address:***

***Point of Contact:***

***Contact Information:***

***Contact Organization Primary:***

***Contact Organization:***Federal Highway Administration (FHWA)

***Contact Address:***

***Address Type:***unknown

***Address:***Washington DC

***Point of Contact:***

***Contact Information:***

***Contact Organization Primary:***

***Contact Organization:***Office of Freight Management and Operation

***Contact Person:***Birat Pandey

***Contact Address:***

***Address Type:***mailing and physical

***Address:***

***City:***

***State or Province:***

***Postal Code:***

***Country:***US

***Contact Voice Telephone:*** 202 366 2842

***Contact Facsimile Telephone:***

***Security Information:***

***Security Classification:***Unclassified

***Native Data Set Environment:***Microsoft Windows 10 Pro (OS Build 19042.928) Service Pack 1; Esri ArcGIS 2.6.1

***Cross Reference:***

***Citation Information:***

***Originator:***Office of Freight Management and Operation

***Publication Date:*** ***20220427***

***Title:***National Highway Freight Network (NHFN)

***Geospatial Data Presentation Form:***vector digital data

***Publication Information:***

***Publication Place:***Washington, DC

***Publisher:***Office of Freight Management and Operation

***Data Quality Information:***

***Attribute Value Accuracy Information:***

***Attribute Accuracy Report:***Quality checks were for cross referencing purposes. The dataset was cross-referenced with the state dataset to determine if the spatial data and attribute data were accurate within each state.

***Logical Consistency Report:***The uniqueness of entity IDs and the values of begin and end milepost values were generated by the computer algorithm developed under ArcGIS Pro 2.6.1 environment.

***Completeness Report:***All NHFN links with HPMS 2019 GIS network representation have been conflated to the NHFN.

***Positional Accuracy:***

***Horizontal Positional Accuracy:***

***Horizontal Positional Accuracy Report:***The original elements of the NHFN have been conflated to the ARNOLD 2019 GIS network, which requires spatial resolution of 1:100,000 or better. However, most of the state submitted data has spatial resolution between 1:5,000 to 1:10,000.

***Spatial Data Organization Information:***

***Direct Spatial Reference Method:***Vector

***Point and Vector Object Information:***

***SDTS Terms Description:***

***SDTS Point and Vector Object Type:***String

***Point and Vector Object Count:***626366

***Spatial Reference Information:***

***Horizontal Coordinate System Definition:***

***Geographic:***

***Latitude Resolution:***8.983152841195215e-009

***Longitude Resolution:***8.983152841195215e-009

***Geographic Coordinate Units:***Decimal Degrees

***Geodetic Model:***

***Horizontal Datum Name:***D WGS 1984

***Ellipsoid Name:***WGS 1984

***Semi-major Axis:***6378137.0

***Denominator of Flattening Ratio:***298.257223563

***Entity and Attribute Information:***

***Detailed Description:***

***Entity Type:***

***Entity Type Label:***NHFN

***Entity Type Definition:***National Highway Freight Network

***Entity Type Definition Source:***FHWA

***Attribute:***

***Attribute Label:*** VERSION

***Attribute Definition:*** Build date

***Attribute Definition Source:***Preparer

***Attribute:***

***Attribute Label:*** YEAR\_RECOR

***Attribute Definition:*** ARNOLD date year (shape geometry)

***Attribute Definition Source:***ARNOLD 2019

***Attribute:***

***Attribute Label:*** STATE\_CODE

***Attribute Definition:*** State 2-digit code

***Attribute Definition Source:***ARNOLD 2019

***Attribute:***

***Attribute Label:*** ROUTEID

***Attribute Definition:*** State LRS Route ID of ARNOLD Network

***Attribute Definition Source:***ARNOLD 2019

***Attribute:***

***Attribute Label:*** BEGMP

***Attribute Definition:*** Calibrated Beginning Mile Point for ARNOLD segment

***Attribute Definition Source:***ARNOLD 2019

***Attribute:***

***Attribute Label:*** ENDMP

***Attribute Definition:*** Calibrated Ending Mile Point of ARNOLD segment

***Attribute Definition Source:***ARNOLD 2019

***Attribute:***

***Attribute Label:*** SIGN1

***Attribute Definition:*** The SIGN1 field contains the designated primary Sign Route for the segment.

***Attribute Definition Source:***NHS

***Attribute:***

***Attribute Label:*** SIGNT1

***Attribute Definition:*** Describes the type of the sign route

***Attribute Definition Source:***NHS

***Attribute:***

***Attribute Label:*** SIGNN1

***Attribute Definition:*** Contains the actual sign route numbers

***Enumerated Domain:***

***Enumerated Domain Value:***I

***Enumerated Domain Value Definition:***Interstate Route

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***U

***Enumerated Domain Value Definition:***US Route

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***S

***Enumerated Domain Value Definition:***State Route

***Enumerated Domain Value Definition Source:***NHS

***Attribute Definition Source:***NHS

***Attribute:***

***Attribute Label:*** LNAME

***Attribute Definition:*** Local Street Name

***Attribute Definition Source:***NHS

***Attribute:***

***Attribute Label:*** NHS

***Attribute Definition:*** Type of NHS

***Attribute Definition Source:***NHS 2019

***Attribute Domain Values:***

***Enumerated Domain:***

***Enumerated Domain Value:***0

***Enumerated Domain Value Definition:***Not on NHS

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***1

***Enumerated Domain Value Definition:***Interstate

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***3

***Enumerated Domain Value Definition:***Non-Interstate STRAHNET

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***4

***Enumerated Domain Value Definition:***STRAHNET Connector

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***7

***Enumerated Domain Value Definition:***Other NHS

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***8

***Enumerated Domain Value Definition:***Approved Intermodal

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***9

***Enumerated Domain Value Definition:***Segment is dual designated as both an Approved Intermodal Connector and STRAHNET

***Enumerated Domain Value Definition Source:***NHS

***Enumerated Domain:***

***Enumerated Domain Value:***10

***Enumerated Domain Value Definition:***Principal arterial added to the NHS under MAP-21

***Enumerated Domain Value Definition Source:***NHS

***Attribute:***

***Attribute Label:*** NHFN\_CODE

***Attribute Definition:*** Type of NHFN

***Attribute Definition Source:***NHFN 2021

***Attribute Domain Values:***

***Enumerated Domain:***

***Enumerated Domain Value:***0

***Enumerated Domain Value Definition:***Not on NHFN

***Enumerated Domain Value Definition Source:***NHFN

***Enumerated Domain:***

***Enumerated Domain Value:***1

***Enumerated Domain Value Definition:***PHFS Route

***Enumerated Domain Value Definition Source:***NHFN

***Enumerated Domain:***

***Enumerated Domain Value:***2

***Enumerated Domain Value Definition:***Non-PHFS Interstate

***Enumerated Domain Value Definition Source:***NHFN

***Attribute:***

***Attribute Label:*** SOURCE

***Attribute Definition:*** Source of the geometry of the segment

***Attribute Definition Source:***Preparer

***Attribute:***

***Attribute Label:*** ST\_NAME

***Attribute Definition:*** Define the full of state

***Attribute Definition Source:*** NHFN

***Attribute:***

***Attribute Label:*** LENGTH

***Attribute Definition:*** Geodesic Length of the segment

***Attribute Definition Source:***ARNOLD 2019

***Distribution Information:***

***Distributor:***

***Contact Information:***

***Contact Organization Primary:***

***Contact Organization:***Office of Freight Management and Operation

***Contact Person:*** Birat Pandey

***Contact Position:***Geospatial Information Systems

***Contact Address:***

***Address Type:***unknown

***Address:***

***City:***

***State or Province:***

***Postal Code:***

***Contact Voice Telephone:*** *202 366 2842*

***Contact Electronic Mail Address:***

***Resource Description:***National Highway Freight Network (NHFN)

***Distribution Liability:***None

***Standard Order Process:***

***Digital Form:***

***Digital Transfer Information:***

***Format Name:***ESRI Shapefile

***Format Version Number:***2022

***File Decompression Technique:***No compression applied. However, if using digital transfer online option, note access instructions.

***Transfer Size:***36.6 MB

***Digital Transfer Option:***

***Offline Option:***

***Offline Media:***

***Recording Capacity:***

***Recording Density:***650

***Recording Density Units:***megabytes

***Recording Format:***ISO 9660

***Fees:***None

***Ordering Instructions:***For questions about the National Highway Freight Network (NHFN), please call 202-366-2842 or E-mail [birat.pandey@dot.gov](mailto:birat.pandey@dot.gov) NHFN data and individual datasets can be downloaded from the

***Available Time Period:***

***Time Period Information:***

***Single Date/Time:***

***Calendar Date:*** ***20220427***

***Metadata Reference Information:***

***Metadata Date:***20220427

***Metadata Contact:***

***Contact Information:***

***Contact Organization Primary:***

***Contact Organization:***FHWA

***Contact Address:***

***Address Type:***unknown

***Address:***

***City:***

***State or Province:***

***Postal Code:***

***Metadata Standard Name:***FGDC Content Standard for Digital Geospatial Metadata

***Metadata Standard Version:***FGDC-STD-001-1998

***Metadata Time Convention:***local time