

Rail Junctions

Identification Information:

Citation:

Citation Information:

Publication Date: 20160615

Title: Rail Junctions

Geospatial Data Presentation Form: vector digital data

Online Linkage: <https://gii.dhs.gov/hifld/data/secure/>

Larger Work Citation:

Citation Information:

Title: HIFLD Open and HIFLD Secure

Geospatial Data Presentation Form: GIS Data Project/Collection

Description:

Abstract: The Rail Junctions layer, along with the Railroads layer, is a comprehensive database of the nation's railroad system. The data set covers all 50 states, the District of Columbia and Puerto Rico. No rail lines exist in American Samoa, Guam, Northern Mariana Islands, and the Virgin Islands of the US. This product is a completed deliverable.

Purpose: This Rail Junctions data set provides points representing rail stations, rail interchange junctions, and end points of rail lines along with an optional name for the location for the Homeland Infrastructure Foundation-Level Data (HIFLD) database (<https://gii.dhs.gov/HIFLD>). This shapefile was manually converted from its original feature class format by the National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Team to mitigate automated conversion errors.

Status:

Progress: Complete

Maintenance and Update Frequency: Annually

Spatial Domain:

Bounding Coordinates:

West Bounding Coordinate: -156.689726

East Bounding Coordinate: -67.291101

North Bounding Coordinate: 64.923979

South Bounding Coordinate: 20.880145

Keywords:

Theme:

Theme Keyword Thesaurus: None

Theme Keyword: nodes

Theme Keyword: homeland security

Theme Keyword: emergency response

Theme Keyword: homeland defense

Theme Keyword: network

Theme Keyword: railroad

Place:

Place Keyword Thesaurus: None

Place Keyword: District of Columbia

Place Keyword: Puerto Rico

Place Keyword: USA

Place Keyword: Hawaii

Place Keyword: Alaska

Place Keyword: Continental United States

Access Constraints: None

Use Constraints: None (Public Use). Users are advised to read the data set's metadata thoroughly to understand appropriate use and data limitations.

Point of Contact:

Contact Information:

Contact Organization Primary:

Contact Organization: Oak Ridge National Laboratory

Contact Address:

Address Type: mailing and physical

Address: One Bethel Valley Rd, MS-6017

City: Oak Ridge

State or Province: TN

Postal Code: 37831

Country: US

Contact Voice Telephone: 865-241-3976

Contact Facsimile Telephone: 865-241-6261

Data Set Credit: Oak Ridge National Laboratory (ORNL) Geographic Information Science and Technology (GIST) Group, National Geospatial-Intelligence Agency (NGA) Homeland Security Infrastructure Program (HSIP) Vector Team

Native Data Set Environment: Microsoft Windows Server 2008 R2 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.1.4959

Data Quality Information:

Attribute Value Accuracy Information:

Attribute Accuracy Report: No formal attribute accuracy test was conducted. Data from the authoritative sources (as identified in other sections of this metadata) is assumed to be correct and accurate. See also "Overview Description" in the "Entities and Attributes" metadata section.

Logical Consistency Report: Data were extracted from sources (identified in the SOURCE field) and other open source documents, records, and websites to populate the attribute fields. During quality control, attributes were checked to ensure that they fell within the expected ranges or had expected/valid values. Text attribute values were checked for spelling and usage consistency. No topology tests were conducted. All records were verified to occur within the spatial domain of the shapefile.

Completeness Report: Data is complete.

Positional Accuracy:

Horizontal Positional Accuracy:

Horizontal Positional Accuracy Report: None; all efforts are made to place the geographic representation of the facility, terminal, station, or control point on-entity using the best available imagery from a wide variety of sources.

Vertical Positional Accuracy:

Vertical Positional Accuracy Report: None; dataset contains no vertical data.

Lineage:

Process Step:

Process Description:

Authoritative data sources are identified through open source research. That data is then acquired and transformed into a usable data format. The properly formatted data then goes through preprocessing steps that includes a geocoding operation to give spatial context to the data. The data goes through further refinement using remote sensing techniques. After preprocessing, every record goes through a review process and each point is moved to an on-entity network location based on interpretation of the best available imagery and open source information.

Spatial Data Organization Information:

Direct Spatial Reference Method: Vector

Point and Vector Object Information:

SDTS Terms Description:

Point and Vector Object Count: 192957

Entity and Attribute Information:

Detailed Description:

Entity Type:

Entity Type Label: RailJunctions

Entity Type Definition: Table containing attribute information associated with the data set.

Entity Type Definition Source: Oak Ridge National Laboratory

Attribute:

Attribute Label: BNDRY

Attribute Definition: Boundary code

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: 2

Enumerated Domain Value Definition: International boundary point

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: 1

Enumerated Domain Value Definition: State boundary point

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: 0

Enumerated Domain Value Definition: Normal point

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: INTTYPE

Attribute Definition: Type of interchange point

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: T

Enumerated Domain Value Definition: Terminal railroad interchange

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: M

Enumerated Domain Value Definition: Minor interchange

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: P

Enumerated Domain Value Definition: Primary interchange

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: D

Enumerated Domain Value Definition: Detour connection between railroads

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: O

Enumerated Domain Value Definition: Other point (not an interchange)

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: NAME

Attribute Definition: Station, Control Point, or junction location name

Attribute Definition Source: Oak Ridge National Laboratory, Railroad employee timetable or track chart, SPV Comprehensive Railroad Atlas of North America, Railinc
OPSL

Attribute Domain Values:

Unrepresentable Domain: Station, Control Point, or junction location name.

Attribute:

Attribute Label: STFIPS

Attribute Definition: FIPS state code

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Unrepresentable Domain: Unknown

Attribute:

Attribute Label: STATE

Attribute Definition: Postal code of state

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Unrepresentable Domain: Unknown

Attribute:

Attribute Label: LAT

Attribute Definition: Latitude of the point location.

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 25.466191

Range Domain Maximum: 64.923979

Attribute Units of Measure: Decimal Degrees

Attribute:

Attribute Label: JUNCTCODE

Attribute Definition: Secondary OPSL junction abbreviation. No stations currently have a secondary abbreviation.

Attribute Definition Source: Association of American Railroads, railroads. Railinc
OPSL

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: {Null Value / Empty Field Entry}

Enumerated Domain Value Definition: Unknown

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: NODEID

Attribute Definition: Unique node identification number

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 1001000745

Range Domain Maximum: 99999185731

Attribute:

Attribute Label: FID

Attribute Definition: Internal feature number.

Attribute Definition Source: Esri

Attribute Domain Values:

Unrepresentable Domain: Sequential unique whole numbers that are automatically generated.

Attribute:

Attribute Label: FRANODEID

Attribute Definition: Cross-reference to the FRA 1:100K rail network node identification number.

Attribute Definition Source: Federal Railroad Administration

Attribute Domain Values:

Range Domain:

Range Domain Minimum: 0

Range Domain Maximum: 264821

Attribute:

Attribute Label: LON

Attribute Definition: Longitude of the point location.

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Range Domain:

Range Domain Minimum: -150.123362

Range Domain Maximum: -67.291101

Attribute Units of Measure: Decimal Degrees

Attribute:

Attribute Label: FLAG

Attribute Definition: OPSTL station flag.

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Y

Enumerated Domain Value Definition: OPST station

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: {Null Value / Empty Field Entry}

Enumerated Domain Value Definition: Unknown

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: CREW

Attribute Definition: Crew change location

Attribute Definition Source: Railroad employee timetables, Oak Ridge National Laboratory

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: Y

Enumerated Domain Value Definition: Crew change location

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: N

Enumerated Domain Value Definition: No crew change

Enumerated Domain Value Definition Source: Producer defined

Enumerated Domain:

Enumerated Domain Value: {Null Value / Empty Field Entry}

Enumerated Domain Value Definition: Unknown

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: OTHERTYPE

Attribute Definition: Other type of junction or station. Currently, no stations have information for this field.

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: {Null Value / Empty Field Entry}

Enumerated Domain Value Definition: Unknown

Enumerated Domain Value Definition Source: Producer defined

Attribute:

Attribute Label: JUNCTION

Attribute Definition: Rule 260 junction code. This is a 5-character abbreviation for the location where two railroad companies interchange traffic.

Attribute Definition Source: Railinc OPST, Oak Ridge National Laboratory

Attribute Domain Values:

Unrepresentable Domain: Rule 260 junction code. This is a 5-character abbreviation for the location where two railroad companies interchange traffic.

Attribute:

Attribute Label: SHAPE

Attribute Definition: Feature geometry.

Attribute Definition Source: Esri

Attribute Domain Values:

Unrepresentable Domain: Coordinates defining the features.

Attribute:

Attribute Label: CTFIPS

Attribute Definition: County FIPS code (county line and state boundary nodes have value of 999)

Attribute Definition Source: Oak Ridge National Laboratory

Attribute Domain Values:

Unrepresentable Domain: Unknown

Attribute:

Attribute Label: SPLC

Attribute Definition: Standard Point Location Code of station

Attribute Definition Source: Railinc OPSL, Federal Railroad Administration

Attribute Domain Values:

Unrepresentable Domain: Standard Point Location Code of station

Overview Description:**Entity and Attribute Overview:**

The entity and attribute information provided here describes the tabular data associated with the data set. Please review the detailed descriptions that are provided (the individual attribute descriptions) for information on the values that appear as fields/table entries of the data set. Please see the "Processing Steps" section for further methodology. Some features within this dataset were collected using image processing.

Entity and Attribute Detail Citation: Oak Ridge National Laboratory

Distribution Information:**Distributor:****Contact Information:****Contact Organization Primary:**

Contact Organization: HIFLD Subcommittee

Contact Electronic Mail Address: hifld@hq.dhs.gov

Distribution Liability: Distributor assumes no liability for misuse of data.

Standard Order Process:

Digital Form:

Digital Transfer Information:

Format Name: Vector Digital Data Set (Point)

Fees: None. No fees are applicable for obtaining the data set.

Metadata Reference Information:

Metadata Date: 20161118

Metadata Contact:

Contact Information:

Contact Organization Primary:

Contact Organization: Oak Ridge National Laboratory

Contact Address:

Address Type: mailing and physical

Address: 1 Bethel Valley Road, PO Box 2008

City: Oak Ridge

State or Province: TN

Postal Code: 37831

Country: US

Contact Voice Telephone: (865)-241- 3976

Contact Facsimile Telephone: 865-241-6261

Metadata Standard Name: FGDC Content Standard for Digital Geospatial Metadata

Metadata Standard Version: FGDC-STD-001-1998

Metadata Time Convention: local time