Airport Runway

Tags

US Territories, United States, Transportation Theme, economy, landing, aircraft, runways, transportation, transportation, USA, airports, 2010, 2013, 2012, 2011, NGDA, National Geospatial Data Asset, 2009, 2014, US, air, 2008, 2015

Summary

This data provides users with information about the runway locations and attributes for national and regional analysis applications.

Description

The Airport Runways database is a geographic dataset of runways in the United States and US territories containing information on the physical characteristics of the runways. The 6839 runways in the dataset are runways associated with the 19527 airports in the companion airport data set. This geospatial data is derived from the FAA's National Airspace System Resource Aeronautical Data Product (Effective April 2015).

Credits

The Federal Aviation Administration (FAA) develops and maintains the textual data from which this geospatial layer was derived.

Use limitations

None. Acknowledgment of the Federal Aviation Administration (FAA) and the Office of the Assistant Secretary for Research and Technology's Bureau of Transportation Statistics (OST-R/BTS) National Transportation Atlas Databases (NTAD) 2015 would be appreciated in products derived from these data.

Extent

West -177.392583 East 174.135094
North 71.284878 South -14.340505

Scale Range

Maximum (zoomed in) 1:5,000
Minimum (zoomed out) 1:150,000,000

ArcGIS Metadata

Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE transportation, economy
* CONTENT TYPE Downloadable Data
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No
PLACE KEYWORDS US Territories, United States, USA, US
STRATUM KEYWORDS air
TEMPORAL KEYWORDS 2010, 2013, 2012, 2011, 2009, 2014, 2008, 2015

THEME KEYWORDS economy, transportation
THESAURUS
TITLE ISO 19115 Topic Categories
THEME KEYWORDS Transportation Theme, landing, aircraft, runways, transportation, airports, NGDA, National Geospatial Data Asset
THESAURUS
TITLE polyline

Citation

TITLE Airport Runway
PUBLICATION DATE 2015-01-01
PRESENTATION FORMATS digital map
FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data
COLLECTION TITLE National Transportation Atlas Databases (NTAD) 2015

Citation Contacts

RESPONSIBLE PARTY
ORGANIZATION'S NAME Federal Aviation Administration
CONTACT'S ROLE originator

Resource Details

DATASET LANGUAGES English (UNITED STATES)
DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format
STATUS completed
SPATIAL REPRESENTATION TYPE vector
* PROCESSING ENVIRONMENT Microsoft Windows 7 Version 6.1 (Build 7601) Service Pack 1; Esri ArcGIS 10.3.0.4322
CREDITS
The Federal Aviation Administration (FAA) develops and maintains the textual data from which this geospatial layer was derived.
ARCGIS ITEM PROPERTIES
* NAME airfield_centerline_v5
* SIZE 0.574
LOCATION withheld
* ACCESS PROTOCOL Local Area Network

Extents

EXTENT
DESCRIPTION
publication date
TEMPORAL EXTENT
DATE AND TIME 2015-01-01
EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
WEST LONGITUDE -177.392583
EAST LONGITUDE 174.135094
SOUTH LATITUDE -14.340505
NORTH LATITUDE 71.284878
EXTENT
GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -177.392583
* EAST LONGITUDE 174.135094
* NORTH LATITUDE 71.284878
* SOUTH LATITUDE -14.340505
* EXTENT CONTAINS THE RESOURCE Yes

EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE -19747252.047200
* EAST LONGITUDE 19384630.042800
* SOUTH LATITUDE -1613310.965500
* NORTH LATITUDE 11500389.233300
* EXTENT CONTAINS THE RESOURCE Yes

Resource Points of Contact

POINT OF CONTACT
ORGANIZATION'S NAME Federal Aviation Administration (Aeronautical Information Services, ATA-100)
CONTACT'S ROLE point of contact
CONTACT INFORMATION
PHONE
VOICE 1-800-457-6656 x35442
ADDRESS
TYPE both
DELIVERY POINT 800 Independence Avenue, S.W.
DELIVERY POINT FAA National Headquarters
CITY Washington
ADMINISTRATIVE AREA DC
POSTAL CODE 20591
COUNTRY US

POINT OF CONTACT
INDIVIDUAL'S NAME National Transportation Atlas Databases (NTAD) 2015
ORGANIZATION'S NAME Office of the Assistant Secretary for Research and Technology/Bureau of Transportation Statistics
CONTACT'S POSITION Geospatial Information Systems
CONTACT'S ROLE point of contact
CONTACT INFORMATION
PHONE
VOICE 202-366-DATA
ADDRESS
TYPE
DELIVERY POINT 1200 New Jersey Ave. SE
CITY Washington
ADMINISTRATIVE AREA DC
POSTAL CODE 20590
E-MAIL ADDRESS answers@BTS.gov

Resource Maintenance

RESOURCE MAINTENANCE
UPDATE FREQUENCY annually

Resource Constraints

LEGAL CONSTRAINTS
LIMITATIONS OF USE
None
ECURITY CONSTRAINTS
CLASSIFICATION unclassified
CONSTRAINTS
LIMITATIONS OF USE
None. Acknowledgment of the Federal Aviation Administration (FAA) and the Office of the Assistant Secretary for Research and Technology's Bureau of Transportation Statistics (OST-R/BTS) National Transportation Atlas Databases (NTAD) 2015 would be appreciated in products derived from these data.

Spatial Reference

ARCGIS COORDINATE SYSTEM
* TYPE Projected

* Geographic coordinate reference GCS_WGS_1984
* Projection WGS_1984_Web_Mercator_Auxiliary_Sphere
* Coordinate reference details
  Projected coordinate system
    Well-known identifier 102100
    X origin -21950603.29439573
    Y origin -30241100
    XY scale 144357470.04444832
    Z origin -100000
    Z scale 10000
    M origin -100000
    M scale 10000
    XY tolerance 0.001
    Z tolerance 0.001
    M tolerance 0.001
    High precision true
    Latest well-known identifier 3857
    Well-known text PROJCS["WGS_1984_Web_Mercator_Auxiliary_Sphere",GEOGCS["GCS_WGS_1984",DATUM["D_WGS_1984",SPHEROID["WGS_1984",6378137.0,298.257223563]],PRIMEM["Greenwich",0.0],UNIT["Degree",0.0174532925199433]],PROJECTION["Mercator_Auxiliary_Sphere"],PARAMETER["False_Easting",0.0],PARAMETER["False_Northing",0.0],PARAMETER["Central_Meridian",0.0],PARAMETER["Standard_Parallel_1",0.0],PARAMETER["Auxiliary_Sphere_Type",0.0],UNIT["Meter",1.0],AUTHORITY["EPSG",3857]]

Reference system identifier
* Value 3857
* Codespace EPSG
* Version 8.2.6

Spatial Data Properties

Vector
* Level of topology for this dataset geometry only

Geometric objects
Feature class name airfield_centerline_v5
* Object type composite
* Object count 6839

ArcGIS Feature Class Properties
Feature class name airfield_centerline_v5
* Feature type Simple
* Geometry type Polyline
* Has topology FALSE
* Feature count 6839
* Spatial index TRUE
* Linear referencing FALSE

Data Quality

Scope of quality information ▶
Resource level dataset

Data quality report - Conceptual consistency
Measure description
All linear features in this data set are straight lines. ID is the unique identifier for each record in the dataset. There may be more than one runway (ID) located at a single airport. Airports can be individually identified by the landing facility location identifier (LOCID) or by the site number (SITENO) attribute. OST-R/BTS quality checks were to cross reference the place dataset with the state dataset, to determine that the spatial data and attribute data were accurate

DATA QUALITY REPORT - COMPLETENESS OMISSION

MEASURE DESCRIPTION

Landing facilities in this database consist of those identified in the NFDC 5527 database to be either publicly owned, or privately owned but open to the public, or owned by the U.S. military. The following landing facilities have been excluded: private landing facilities not open to the public, glider ports and ultra light landing facilities, as well as landing facilities that do not have a current LOCID assigned to them.

DATA QUALITY REPORT - QUANTITATIVE ATTRIBUTE ACCURACY

MEASURE DESCRIPTION

Data were obtained from the Federal Aviation Administration's (FAA) National Airspace System Resource Aeronautical Data. This product was published by the Aeronautical Information Services with an Effective Date of April 2015.

DATA QUALITY REPORT - ABSOLUTE EXTERNAL POSITIONAL ACCURACY

DIMENSION horizontal

MEASURE DESCRIPTION

Horizontal positional accuracy is based on coordinate data provided in the FAA National Airspace System Resource Aeronautical Dataset (Effective April 2015). These coordinate data identify the approximate location of the Airport Reference Point (ARP) as reported by the landing facility on the NFDC (National Flight Data Center) 5010 form. According to NFDC guidelines, the location of the ARP should be reported to a horizontal accuracy of one arc second of latitude and longitude. However, the accuracy of these reported coordinates are not verified by FAA.

Lineage

PROCESS STEP

WHEN THE PROCESS OCCURRED 2011-01-01 00:00:00

DESCRIPTION

The creation of this geospatial data layer was completed by OST-R/BTS in April 2015. This Shapefile was derived from textual data on the FAA National Airspace System Resource Aeronautical Data CDROM, effective April 2015. The Apt.txt file was converted into three files using the UNIX command grep. The runway table structure was built in Oracle that followed the structure of the facility runway data described in the Apt_rf.txt file. A control file was built for the desired runway data structure and SQL Loader was used to load the data into the database. The degrees, minutes, and seconds' columns were converted into decimal degrees and ESRI products were used to create the runway linear dataset.

PROCESS CONTACT

INDIVIDUAL'S NAME Office of Geospatial Information Systems

ORGANIZATION'S NAME Office of the Assistant Secretary for Research and Technology's Bureau of Transportation Statistics (OST-R/BTS)

CONTACT'S ROLE processor

CONTACT INFORMATION

PHONE

VOICE 202-366-DATA

ADDRESS

TYPE both

DELIVERY POINT 1200 New Jersey Ave. S.E.

CITY Washington

ADMINISTRATIVE AREA DC

POSTAL CODE 20590

COUNTRY US

E-MAIL ADDRESS answers@bts.gov

SOURCE DATA

RELATIONSHIP TO THE PROCESS STEP used

SOURCE CITATION

ALTERNATE TITLES FAA-NASRAD

SOURCE DATA

DESCRIPTION

Data were obtained from the Federal Aviation Administration's (FAA) National Airspace System Resource Aeronautical Data. This product was published by the Aeronautical Information Services with an Effective Date of April 2015.

SOURCE MEDIUM NAME CD-ROM
SOURCE CITATION
TITLE FAA National Airspace System Resource Aeronautical Data
ALTERNATE TITLES FAA-NASRAD
PUBLICATION DATE 2011-01-01
EDITION FAA National Airspace System Resource Aeronautical Data (Effective April 2015)
PRESENTATION FORMATS digital document
FGDC GEOSPATIAL PRESENTATION FORMAT tabular digital data
RESPONSIBLE PARTY
ORGANIZATION'S NAME Federal Aviation Administration
CONTACT'S ROLE originator
RESPONSIBLE PARTY
ORGANIZATION'S NAME Federal Aviation Administration (FAA)
CONTACT'S ROLE publisher
CONTACT INFORMATION
ADDRESS
DELIVERY POINT Washington, DC
EXTENT OF THE SOURCE DATA
DESCRIPTION
publication date
TEMPORAL EXTENT
DATE AND TIME 2011-01-01

Distribution

DISTRIBUTOR
CONTACT INFORMATION
INDIVIDUAL'S NAME Office of Geospatial Information Systems
ORGANIZATION'S NAME Office of the Assistant Secretary for Research and Technology's Bureau of Transportation Statistics (OST-R/BTS)
CONTACT'S ROLE distributor
CONTACT INFORMATION
PHONE
VOICE 202-366-DATA
ADDRESS
TYPE both
DELIVERY POINT 1200 New Jersey Avenue, SE
DELIVERY POINT Office of the Assistant Secretary for Research and Technology's Bureau of Transportation Statistics (OST-R/BTS)
CITY Washington
ADMINISTRATIVE AREA District of Columbia
POSTAL CODE 20590
COUNTRY US
E-MAIL ADDRESS answers@bts.gov

VAILABLE FORMAT
NAME ESRI Shapefile
VERSION 2013
FILE DECOMPRESSION TECHNIQUE No compression applied. However, if using digital transfer online option, note access instructions.
ORDERING PROCESS
TERMS AND FEES None
DATE OF AVAILABILITY 2011-01-01 00:00:00
INSTRUCTIONS
Call (202-366-DATA), or E-mail (answers@bts.gov) OST-R/BTS to request the National Transportation Atlas Databases (NTAD) 2015 DVD. The NTAD DVD can be ordered from the online bookstore at www.bts.gov. Individual datasets from the NTAD can also be downloaded from the Office of Geospatial Information Systems website at http://www.bts.gov/programs/geographic_information_services/.
TRANSFER OPTIONS
TRANSFER SIZE 2.113
ONLINE SOURCE
LOCATION http://www.bts.gov/programs/geographic_information_services/

TRANSFER OPTIONS
TRANSFER SIZE 2.113
MEDIUM OF DISTRIBUTION
MEDIUM NAME DVD
HOW DATA IS WRITTEN iso9660 (CD-ROM)
RECORDING DENSITY 650
DENSITY UNITS OF MEASURE megabytes
TRANSFER OPTIONS
ONLINE SOURCE
DESCRIPTION National Transportation Atlas Databases (NTAD) 2015
DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class
TRANSFER OPTIONS
* TRANSFER SIZE 0.574
ONLINE SOURCE
LOCATION http://www.bts.gov/programs/geographic_information_services/

Fields

DETAILS FOR OBJECT airfield_centerline_v5 ►
* TYPE Feature Class
* ROW COUNT 6839
DEFINITION
Runways of the United States and its territories in GIS format.
DEFINITION SOURCE
Office of the Assistant Secretary for Research and Technology's Bureau of Transportation Statistics (OST-R/BTS)

FIELD OBJECTID
* ALIAS OBJECTID
* DATA TYPE OID
* WIDTH 4
* PRECISION 0
* SCALE 0
* FIELD DESCRIPTION
Internal feature number.
* DESCRIPTION SOURCE
Esri
* DESCRIPTION OF VALUES
Sequential unique whole numbers that are automatically generated.

FIELD Shape
* ALIAS Shape
* DATA TYPE Geometry
* WIDTH 0
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Feature geometry.
DESCRIPTION SOURCE
ESRI
DESCRIPTION OF VALUES
Coordinates defining the features.

FIELD SiteNumber
* ALIAS SiteNumber
* DATA TYPE String
* WIDTH 11
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
A unique identifying number followed by an asterisk and the 'landing facility type' code. The SITE_NO forms the key to the airport records in the NFDC (5010) database. Example: 04508.*A

DESCRIPTION SOURCE
FAA
CODED VALUES
NAME OF CODELIST List of Official Airport Site Numbers
SOURCE FAA

FIELD StateAbbv
* ALIAS StateAbbv
* DATA TYPE String
* WIDTH 2
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Runway state post office code
DESCRIPTION SOURCE
USPS

CODED VALUES
NAME OF CODELIST List of Official U.S. State and Territory Postal Abbreviations
SOURCE U.S. Post Office

FIELD ID
* ALIAS ID
* DATA TYPE String
* WIDTH 7
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Runway unique identification code. For example: 01/19; 18L/36R (parallel runways); H1 (helipad); N/S (north/south); ALL/WAY (sealane); B1 (baloonport).
DESCRIPTION SOURCE
FAA

CODED VALUES
NAME OF CODELIST List of Official Runway Codes
SOURCE FAA

FIELD Length
* ALIAS Length
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
The physical runway length, to the nearest foot. (Ex. 3500)
DESCRIPTION SOURCE
FAA
DESCRIPTION OF VALUES
measured value

FIELD Width
* ALIAS Width
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
The physical runway width, to the nearest foot. (Ex. 100)
DESCRIPTION SOURCE
FAA
DESCRIPTION OF VALUES
measured value

FIELD PCN

* ALIAS PCN
* DATA TYPE String
* WIDTH 11
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION

Pavement classification number (PCN)-a rating system that expresses the relative load carrying capacity of a pavement in terms of a standard single wheel load. The rating is structured so that a pavement with a particular PCN value can support, without weight restrictions, an aircraft which has an aircraft classification number (ACN) equal to or less than the pavement's PCN value. The data format is PCN/pavement type/subgrade strength/tire pressure/determination method

DESCRIPTION SOURCE

FAA

LIST OF VALUES

VALUE R
DESCRIPTION Pavement Type - Rigid
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE T
DESCRIPTION Pavement Type - Flexible
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE A
DESCRIPTION SUBGRADE STRENGTH LEVEL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE B
DESCRIPTION SUBGRADE STRENGTH LEVEL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE C
DESCRIPTION SUBGRADE STRENGTH LEVEL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE D
DESCRIPTION SUBGRADE STRENGTH LEVEL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE E
DESCRIPTION SUBGRADE STRENGTH LEVEL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE F
DESCRIPTION SUBGRADE STRENGTH LEVEL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE W
DESCRIPTION TIRE PRESSURE CODE
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE X
DESCRIPTION TIRE PRESSURE CODE
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE Y
DESCRIPTION TIRE PRESSURE CODE
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE Z
DESCRIPTION TIRE PRESSURE CODE
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE T
DESCRIPTION TECHNICAL
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE U
DESCRIPTION USING AIRCRAFT
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

FIELD LightsEdge
* ALIAS LightsEdge
* DATA TYPE String
* WIDTH 5
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Runway lights edge intensity
DESCRIPTION SOURCE
FAA

LIST OF VALUES VALUE
HIGH DESCRIPTION
High
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE MED
DESCRIPTION Medium
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE LOW
DESCRIPTION Low
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE NSTD
DESCRIPTION Non-standard lighting system
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

VALUE NONE
DESCRIPTION No edge lighting system
ENUMERATED DOMAIN VALUE DEFINITION SOURCE FAA

FIELD LengthSour
* ALIAS LengthSour
* DATA TYPE String
* WIDTH 16
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Runway length source
DESCRIPTION SOURCE
FAA

FIELD LengthSo_1
* ALIAS LengthSo_1
* DATA TYPE String
* WIDTH 10
* PRECISION 0
* SCALE 0
FIELD DESCRIPTION
Runway length source date (MM/DD/YYYY)
DESCRIPTION SOURCE
FAA
DESCRIPTION OF VALUES
Date

FIELD CapacitySi
* ALIAS CapacitySi
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0

FIELD CapacityDu
* ALIAS CapacityDu
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0

FIELD Capacity2D
* ALIAS Capacity2D
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0

FIELD Capacity_1
* ALIAS Capacity_1
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0

FIELD STFIPS
* ALIAS STFIPS
* DATA TYPE String
* WIDTH 2
* PRECISION 0
* SCALE 0

FIELD DESCRIPTION
The 2-character FIPS code of the State or State equivalent

DESCRIPTION SOURCE
OST-R/BTS

CODED VALUES
NAME OF CODELIST Codes for the Identification of the States, the District of Columbia and the Outlying Areas of the United States, and Associated Areas, FIPS 5-2.
SOURCE U.S. Department of Commerce, National Institute of Standards and Technology

FIELD Shape_Length
* ALIAS Shape_Length
* DATA TYPE Double
* WIDTH 8
* PRECISION 0
* SCALE 0
* FIELD DESCRIPTION
Length of feature in internal units.
* DESCRIPTION SOURCE
Esri
* DESCRIPTION OF VALUES
Positive real numbers that are automatically generated.

References

AGGREGATE INFORMATION
ASSOCIATION TYPE larger work citation
AGGREGATE RESOURCE NAME
TITLE National Transportation Atlas Databases (NTAD) 2015
PUBLICATION DATE 2015-04-01
PRESENTATION FORMATS digital map
FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data
RESOURCE LOCATION ONLINE
LOCATION http://www.bts.gov/programs/geographic_information_services/

Metadata Details

METADATA LANGUAGE English (UNITED STATES)
METADATA CHARACTER SET utf8 - 8 bit UCS Transfer Format
SCOPE OF THE DATA DESCRIBED BY THE METADATA dataset
SCOPE NAME * dataset
* LAST UPDATE 2016-07-26
ARCGIS METADATA PROPERTIES
METADATA FORMAT ArcGIS 1.0
METADATA STYLE FGDC CSDGM Metadata
STANDARD OR PROFILE USED TO EDIT METADATA FGDC
CREATED IN ARCGIS FOR THE ITEM 2016-03-21 17:41:25
LAST MODIFIED IN ARCGIS FOR THE ITEM 2016-07-26 13:56:59
AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2016-07-26 13:56:20

Metadata Contacts

METADATA CONTACT
INDIVIDUAL'S NAME National Transportation Atlas Databases (NTAD) 2015
ORGANIZATION'S NAME Office of the Assistant Secretary for Research and Technology/Bureau of Transportation Statistics
CONTACT'S POSITION Geospatial Information Systems
CONTACT'S ROLE point of contact
CONTACT INFORMATION
PHONE
VOICE 202-366-DATA
ADDRESS
TYPE
DELIVERY POINT 1200 New Jersey Ave. SE
CITY Washington
ADMINISTRATIVE AREA DC
POSTAL CODE 20590
E-MAIL ADDRESS answers@BTS.gov