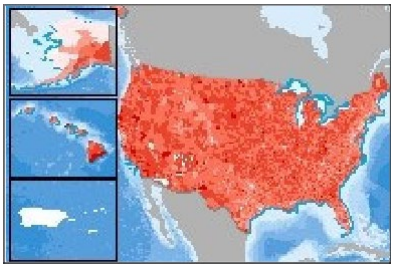
Household Transportation Energy Burden



Tags

census tract, transportation energy burden, mpg, vehicle miles travelled, fuel costs

Summary

Depicts census-tract-level estimates of household transportation energy affordability in terms of the transportation energy burden, defined as the percentage of annual household income spent on the household vehicle fuel costs.

Description

This dataset provides census-tract-level estimates of household transportation energy affordability in terms of the transportation energy burden, defined as the percentage of annual household income spent on the household vehicle fuel costs. In addition to being a large household expenditure, fuel costs are also the most volatile cost component of total household transportation expenditures. Household transportation energy burden depends on annual vehicle miles traveled (VMT), fuel price, and vehicle fuel efficiency. See "Affordability of Household Transportation Fuel Costs by Region and Socioeconomic Factors" at https://publications.anl.gov/anlpubs/2021/01/165141.pdf for further details.

Credits

Yan Zhou, Spencer Aeschliman, and David Gohlke - Energy Systems Division - Argonne National Laboratory - December 2020

Use limitations

There are no access and use limitations for this item.

Extent

West -179.231086 **East** 179.859681
North 71.439786 **South** 18.905547

Scale Range

Maximum (zoomed in) 1:50,000
Minimum (zoomed out) 1:20,000,000

Topics and Keywords

THEMES OR CATEGORIES OF THE RESOURCE economy, transportation
* CONTENT TYPE Downloadable Data
EXPORT TO FGDC CSDGM XML FORMAT AS RESOURCE DESCRIPTION No

Citation

TITLE Household Transportation Energy Burden
PUBLICATION DATE 2020-12
PRESENTATION FORMATS * digital map

Citation Contacts

RESPONSIBLE PARTY
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ORGANIZATION'S NAME Argonne National Laboratory
CONTACT'S ROLE point of contact

CONTACT INFORMATION
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COUNTRY US
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Resource Details

DATASET LANGUAGES * English (UNITED STATES)
DATASET CHARACTER SET utf8 - 8 bit UCS Transfer Format
STATUS completed
SPATIAL REPRESENTATION TYPE * vector
* PROCESSING ENVIRONMENT Version 6.2 (Build 9200) ; Esri ArcGIS 10.8.0.12790
CREDITS
Yan Zhou, Spencer Aeschliman, and David Gohlke - Energy Systems Division - Argonne National Laboratory - December 2020

ARCGIS ITEM PROPERTIES
* NAME tracts_hh_transp_energy_afford

Extents

EXTENT
DESCRIPTION
Report published

GEOGRAPHIC EXTENT
BOUNDING RECTANGLE
EXTENT TYPE Extent used for searching
* WEST LONGITUDE -179.231086
* EAST LONGITUDE 179.859681
* NORTH LATITUDE 71.439786
* SOUTH LATITUDE 18.905547
* EXTENT CONTAINS THE RESOURCE Yes
TEMPORAL EXTENT
DATE AND TIME 2020-12
EXTENT IN THE ITEM'S COORDINATE SYSTEM
* WEST LONGITUDE -19951913.227845
* EAST LONGITUDE 20021888.103161
* SOUTH LATITUDE 2143818.754764
* NORTH LATITUDE 11554348.349990
* EXTENT CONTAINS THE RESOURCE Yes

Resource Maintenance

RESOURCE MAINTENANCE
UPDATE FREQUENCY not planned

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 -22041257.952553775
    Y ORIGIN -30241100
    XY SCALE 144148035.48642668
    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 8.8(9.3.1.2)

Spatial Data Properties ►

VECTOR
* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only
  GEOMETRIC OBJECTS
    FEATURE CLASS NAME tracts_hh_transp_energy_afford
    * OBJECT TYPE composite
    * OBJECT COUNT 72755

ARCGIS FEATURE CLASS PROPERTIES
  FEATURE CLASS NAME tracts_hh_transp_energy_afford
  * FEATURE TYPE Simple
  * GEOMETRY TYPE Polygon
  * HAS TOPOLOGY FALSE
  * FEATURE COUNT 72755
  * SPATIAL INDEX TRUE
  * LINEAR REFERENCING FALSE

Distribution

DISTRIBUTION FORMAT
* NAME File Geodatabase Feature Class

Fields

DETAILS FOR OBJECT tracts_hh_transp_energy_afford
* TYPE Feature Class
* ROW COUNT 72755

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

FIELD NAMELSAD
* ALIAS NAMELSAD
* DATA TYPE String
* WIDTH 20
* PRECISION 0
* SCALE 0

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

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

FIELD INTPTLAT
* ALIAS INTPTLAT
* DATA TYPE String
* WIDTH 11
* PRECISION 0
* SCALE 0

FIELD INTPTLON ►
* ALIAS INTPTLON
* DATA TYPE String
* WIDTH 12
* PRECISION 0
* SCALE 0

FIELD State
* ALIAS State
* DATA TYPE String
* WIDTH 8000
* PRECISION 0
* SCALE 0

FIELD County
* ALIAS County
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD zip3
* ALIAS zip3
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

FIELD Tract
* ALIAS Tract
* DATA TYPE String
* WIDTH 8000
* PRECISION 0
* SCALE 0

FIELD pop
* ALIAS pop
* DATA TYPE Integer
* WIDTH 4
* PRECISION 0
* SCALE 0

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

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

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

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

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

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

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

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.

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

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 2021-06
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 2021-06-02
LAST MODIFIED IN ARCGIS FOR THE ITEM 2021-06-02

AUTOMATIC UPDATES
HAVE BEEN PERFORMED Yes
LAST UPDATE 2021-06-02

Metadata Contacts

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