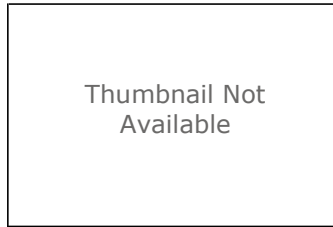


## TR\_2021\_EnergyBurdenVMT\_Argonne

File Geodatabase Feature Class



### Tags

Argonne National Laboratory, Argonne, ANL/ESD-20/11, Affordability of Household Transportation Fuel Costs by Region and Socioeconomic Factors, Energy Systems, U.S. Department of Energy, DOE, Yan Zhou, spencer Aeschliman, David Gohlke, Louisiana, VMT, Vehicle Miles Traveled, Household Annual VMT, Cost of Fuel, Energy Burden, Demographics, Affordability, Regional Planning Commission, RPC, New Orleans

### Summary

"Transportation energy is an important component of household budgets. Household vehicle fuel, one part of total transportation energy costs is over 3% of total household expenditures nationwide in the U.S. The average annual expenditure of over \$2,000 for vehicle fuel (mostly gasoline) is comparable to the total average household expenditures for electricity and natural gas combined. However, these average values vary geographically, and lower income households can face higher energy cost burdens. The highly resolved data developed in this study reveals the variation of household energy burdens across the country and provides localized data to support local decision making." <https://publications.anl.gov/anlpubs/2021/01/165141.pdf>

### Description

U.S. Census tract geographic joined to Argonne National Laboratory Census Tract Data for population, Household Annual VMT, Annual Fuel Cost, and Energy Burden results from Argonne Laboratory data analysis cited: <https://publications.anl.gov/anlpubs/2021/01/165141.pdf>

### Credits

Yan Zhou, Spencer Aeschliman, David Gohlke  
Energy Systems Division, Argonne National Laboratory

### Use limitations

There are no access and use limitations for this item.

### Extent

**West** -94.043352 **East** -88.758388  
**North** 33.019543 **South** 28.855127

### Scale Range

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

### ArcGIS Metadata ►

#### Topics and Keywords ►

\* CONTENT TYPE Downloadable Data

[Hide Topics and Keywords ▲](#)

#### Citation ►

\* TITLE TR\_2021\_EnergyBurdenVMT\_Argonne  
PUBLICATION DATE 2021-10-29 00:00:00

PRESENTATION FORMATS \* digital map  
FGDC GEOSPATIAL PRESENTATION FORMAT vector digital data

COLLECTION TITLE Affordability of Household Transportation Fuel Costs and Socioeconomic Factors By Census Tracts for

Louisiana

[Hide Citation ▲](#)**Citation Contacts ▶**

## RESPONSIBLE PARTY

INDIVIDUAL'S NAME Lynn Dupont

ORGANIZATION'S NAME The Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany and Tangipahoa Parishes, (RPC)

CONTACT'S POSITION GIS Manager

CONTACT'S ROLE processor

## CONTACT INFORMATION ▶

## PHONE

VOICE 504 483-8500

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TYPE both

DELIVERY POINT 10 Veterans Blvd.

CITY New Orleans

ADMINISTRATIVE AREA Louisiana

POSTAL CODE 70124

COUNTRY US

E-MAIL ADDRESS ldupont@norpc.org

[Hide Contact information ▲](#)

## RESPONSIBLE PARTY

INDIVIDUAL'S NAME Yan Zhou

ORGANIZATION'S NAME Argonne National Laboratory

CONTACT'S POSITION Mobility and Deployment Group Leader | Center for Systems Assessment

CONTACT'S ROLE originator

## CONTACT INFORMATION ▶

## PHONE

VOICE (630) 252-1215 (office)

## ADDRESS

TYPE both

DELIVERY POINT 9700 Cass Ave.

CITY Lemont

ADMINISTRATIVE AREA IL

POSTAL CODE 60439

E-MAIL ADDRESS yzhou@anl.gov

[Hide Contact information ▲](#)[Hide Citation Contacts ▲](#)**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 10.7.1.11595

## CREDITS

Yan Zhou, Spencer Aeschliman, David Gohlke

Energy Systems Division, Argonne National Laboratory

## ARCGIS ITEM PROPERTIES

\*NAME TR\_2021\_EnergyBurdenVMT\_Argonne

\*LOCATION file://

\\norpc.org\data\RedBeans\Vector\transportation\_NSDI\Performance\_Measures\VMT\EnergyBurden\_TR2021\_Argonne.gdb

\*ACCESS PROTOCOL Local Area Network

[Hide Resource Details ▲](#)

## Extents ►

### EXTENT

DESCRIPTION  
Louisiana

### GEOGRAPHIC EXTENT

#### BOUNDING RECTANGLE

EXTENT TYPE Extent used for searching  
\* WEST LONGITUDE -94.043352  
\* EAST LONGITUDE -88.758388  
\* NORTH LATITUDE 33.019543  
\* SOUTH LATITUDE 28.855127  
\* EXTENT CONTAINS THE RESOURCE Yes

### EXTENT IN THE ITEM'S COORDINATE SYSTEM

\* WEST LONGITUDE -94.043352  
\* EAST LONGITUDE -88.758388  
\* SOUTH LATITUDE 28.855127  
\* NORTH LATITUDE 33.019543  
\* EXTENT CONTAINS THE RESOURCE Yes

[Hide Extents ▲](#)

## Resource Maintenance ►

### RESOURCE MAINTENANCE

UPDATE FREQUENCY unknown

[Hide Resource Maintenance ▲](#)

## Spatial Reference ►

### ARCGIS COORDINATE SYSTEM

\* TYPE Geographic  
\* GEOGRAPHIC COORDINATE REFERENCE GCS\_North\_American\_1983  
\* COORDINATE REFERENCE DETAILS

#### GEOGRAPHIC COORDINATE SYSTEM

WELL-KNOWN IDENTIFIER 4269

X ORIGIN -400

Y ORIGIN -400

XY SCALE 1111948722.222221

Z ORIGIN -100000

Z SCALE 10000

M ORIGIN -100000

M SCALE 10000

XY TOLERANCE 8.9831528411952133e-09

Z TOLERANCE 0.001

M TOLERANCE 0.001

HIGH PRECISION true

LEFT LONGITUDE -180

LATEST WELL-KNOWN IDENTIFIER 4269

WELL-KNOWN TEXT GEOGCS["GCS\_North\_American\_1983",DATUM["D\_North\_American\_1983",SPHEROID  
["GRS\_1980",6378137.0,298.257222101]],PRIMEM["Greenwich",0.0],UNIT  
["Degree",0.0174532925199433],AUTHORITY["EPSG",4269]]

### REFERENCE SYSTEM IDENTIFIER

\* VALUE 4269  
\* CODESPACE EPSG  
\* VERSION 6.12(3.0.1)

[Hide Spatial Reference ▲](#)

## Spatial Data Properties ►

### VECTOR ►

\* LEVEL OF TOPOLOGY FOR THIS DATASET geometry only

### GEOMETRIC OBJECTS

FEATURE CLASS NAME TR\_2021\_EnergyBurdenVMT\_Argonne  
 \* OBJECT TYPE composite  
 \* OBJECT COUNT 1148

[Hide Vector ▲](#)

#### ARCGIS FEATURE CLASS PROPERTIES ►

FEATURE CLASS NAME TR\_2021\_EnergyBurdenVMT\_Argonne  
 \* FEATURE TYPE Simple  
 \* GEOMETRY TYPE Polygon  
 \* HAS TOPOLOGY FALSE  
 \* FEATURE COUNT 1148  
 \* SPATIAL INDEX TRUE  
 \* LINEAR REFERENCING FALSE

[Hide ArcGIS Feature Class Properties ▲](#)

[Hide Spatial Data Properties ▲](#)

## Data Quality ►

SCOPE OF QUALITY INFORMATION ►  
 RESOURCE LEVEL dataset

[Hide Scope of quality information ▲](#)

[Hide Data Quality ▲](#)

## Lineage ►

#### LINEAGE STATEMENT

Energy Burden data analysis acquired from Argonne National Labs in Excel format by U.S. Census 2018 Census Tracts coordinating with American Community Survey 5 Year Estimate data. Data joined to Census Tract geography, exported to file geodatabase with named attributes by Regional Planning Commission in New Orleans (NORPC).

[Hide Lineage ▲](#)

## Geoprocessing history ►

#### PROCESS

PROCESS NAME  
 DATE 2021-10-29 10:38:32  
 TOOL LOCATION c:\program files (x86)\arcgis\desktop10.7\ArcToolbox\Toolboxes\Conversion Tools.tbx\FeatureClassToFeatureClass

#### COMMAND ISSUED

```
FeatureClassToFeatureClass TR_2021_energyburdenVMT_Argonne
Z:\Vector\transportation_NSDI\Performance_Measures\VMT\EnergyBurden_TR2021_Argonne.gdb
TR_2021_EnergyBurdenVMT_Argonne # "GEOID" "GEOID" true true false 11 Text 0
0 ,First,#,TR_2021_energyburdenVMT_Argonne,GEOID,-1,-1;NAMELSAD "NAMELSAD" true true false 20 Text 0
0 ,First,#,TR_2021_energyburdenVMT_Argonne,NAMELSAD,-1,-1;ALAND "ALAND" true true false 19 Double 0
0 ,First,#,TR_2021_energyburdenVMT_Argonne,ALAND,-1,-1;AWATER "AWATER" true true false 19 Double 0
0 ,First,#,TR_2021_energyburdenVMT_Argonne,AWATER,-1,-1;INTPTLAT "INTPTLAT" true true false 11 Text 0
0 ,First,#,TR_2021_energyburdenVMT_Argonne,INTPTLAT,-1,-1;INTPTLON "INTPTLON" true true false 12 Text 0
0 ,First,#,TR_2021_energyburdenVMT_Argonne,INTPTLON,-1,-1;OBJECTID "OBJECTID" true true false 10
Long 0 10 ,First,#,TR_2021_energyburdenVMT_Argonne,OBJECTID,-1,-1;SHAPE_Leng "SHAPE_Leng" true true
false 19 Double 0 0 ,First,#,TR_2021_energyburdenVMT_Argonne,SHAPE_Leng,-1,-1;SHAPE_Area "SHAPE_Area"
true true false 19 Double 0 0 ,First,#,TR_2021_energyburdenVMT_Argonne,SHAPE_Area,-1,-1;State "State"
true true false 254 Text 0 0 ,First,#,TR_2021_energyburdenVMT_Argonne,State,-1,-1;County "County"
true true false 16 Double 6 15 ,First,#,TR_2021_energyburdenVMT_Argonne,County,-1,-1;zip3 "zip3" true
true false 16 Double 6 15 ,First,#,TR_2021_energyburdenVMT_Argonne,zip3,-1,-1;Tract "Tract" true true
false 254 Text 0 0 ,First,#,TR_2021_energyburdenVMT_Argonne,Tract,-1,-1;population "population" true
true false 16 Double 6 15 ,First,#,TR_2021_energyburdenVMT_Argonne,population,-1,-1;HH_Annual_VMT
"HH_Annual_VMT" true true false 16 Double 6 15 ,First,#,TR_2021_energyburdenVMT_Argonne,HH_Annual_,-
1,-1;Annual_Fuel_cost "Annual_Fuel_cost" true true false 16 Double 6
15 ,First,#,TR_2021_energyburdenVMT_Argonne,Annual_Fue,-1,-1;MedianHHInc_Annual_2018dol
"MedianHHInc_Annual_2018dol" true true false 16 Double 6
15 ,First,#,TR_2021_energyburdenVMT_Argonne,HH_income,-1,-1;Energy_Burden_percent
"Energy_Burden_percent" true true false 16 Double 6
15 ,First,#,TR_2021_energyburdenVMT_Argonne,Energy_bur,-1,-1" #
```

INCLUDE IN LINEAGE WHEN EXPORTING METADATA No

[Hide Geoprocessing history ▲](#)

## Distribution ►

DISTRIBUTION FORMAT

- \* NAME File Geodatabase Feature Class

[Hide Distribution ▲](#)

## Fields ►

DETAILS FOR OBJECT TR\_2021\_EnergyBurdenVMT\_Argonne ►

- \* TYPE Feature Class
- \* ROW COUNT 1148

FIELD OBJECTID\_1 ►

- \* ALIAS OBJECTID\_1
- \* 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.

[Hide Field OBJECTID\\_1 ▲](#)

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.

[Hide Field Shape ▲](#)

FIELD GEOID ►

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

[Hide Field GEOID ▲](#)

FIELD NAMELSAD ►

- \* ALIAS NAMELSAD
- \* DATA TYPE String
- \* WIDTH 20
- \* PRECISION 0
- \* SCALE 0

[Hide Field NAMELSAD ▲](#)

FIELD **ALAND** ▶

- \* ALIAS ALAND
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

[Hide Field ALAND ▲](#)

FIELD **AWATER** ▶

- \* ALIAS AWATER
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

[Hide Field AWATER ▲](#)

FIELD **INTPTLAT** ▶

- \* ALIAS INTPTLAT
- \* DATA TYPE String
- \* WIDTH 11
- \* PRECISION 0
- \* SCALE 0

[Hide Field INTPTLAT ▲](#)

FIELD **INTPTLON** ▶

- \* ALIAS INTPTLON
- \* DATA TYPE String
- \* WIDTH 12
- \* PRECISION 0
- \* SCALE 0

[Hide Field INTPTLON ▲](#)

FIELD **OBJECTID** ▶

- \* ALIAS OBJECTID
- \* DATA TYPE Integer
- \* WIDTH 4
- \* PRECISION 0
- \* SCALE 0

[Hide Field OBJECTID ▲](#)

FIELD **SHAPE\_Leng** ▶

- \* ALIAS SHAPE\_Leng
- \* DATA TYPE Double
- \* WIDTH 8
- \* PRECISION 0
- \* SCALE 0

[Hide Field SHAPE\\_Leng ▲](#)

FIELD **State** ▶

- \* ALIAS State
- \* DATA TYPE String
- \* WIDTH 254
- \* PRECISION 0
- \* SCALE 0

[Hide Field State ▲](#)

FIELD **County** ▶

\* ALIAS County  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0  
\* SCALE 0

[Hide Field County ▲](#)

FIELD zip3 ►  
\* ALIAS zip3  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0  
\* SCALE 0

[Hide Field zip3 ▲](#)

FIELD Tract ►  
\* ALIAS Tract  
\* DATA TYPE String  
\* WIDTH 254  
\* PRECISION 0  
\* SCALE 0

[Hide Field Tract ▲](#)

FIELD population ►  
\* ALIAS population  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0  
\* SCALE 0

[Hide Field population ▲](#)

FIELD HH\_Annual\_VMT ►  
\* ALIAS HH\_Annual\_VMT  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0  
\* SCALE 0

[Hide Field HH\\_Annual\\_VMT ▲](#)

FIELD Annual\_Fuel\_cost ►  
\* ALIAS Annual\_Fuel\_cost  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0  
\* SCALE 0

[Hide Field Annual\\_Fuel\\_cost ▲](#)

FIELD MedianHHInc\_Annual\_2018dol ►  
\* ALIAS MedianHHInc\_Annual\_2018dol  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0  
\* SCALE 0

[Hide Field MedianHHInc\\_Annual\\_2018dol ▲](#)

FIELD Energy\_Burden\_percent ►  
\* ALIAS Energy\_Burden\_percent  
\* DATA TYPE Double  
\* WIDTH 8  
\* PRECISION 0

\* SCALE 0

[Hide Field Energy\\_Burden\\_percent ▲](#)

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.

[Hide Field Shape\\_Length ▲](#)

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.

[Hide Field Shape\\_Area ▲](#)

[Hide Details for object TR\\_2021\\_EnergyBurdenVMT\\_Argonne ▲](#)

[Hide Fields ▲](#)

**Metadata Details ►**

\* METADATA LANGUAGE English (UNITED STATES)

SCOPE OF THE DATA DESCRIBED BY THE METADATA \* dataset

SCOPE NAME \* dataset

\* LAST UPDATE 2021-12-20

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 2021-10-29 10:38:30

LAST MODIFIED IN ARCGIS FOR THE ITEM 2021-12-20 16:17:15

AUTOMATIC UPDATES

HAVE BEEN PERFORMED Yes

LAST UPDATE 2021-12-20 16:17:15

[Hide Metadata Details ▲](#)



**Metadata Contacts** ▶

## METADATA CONTACT

INDIVIDUAL'S NAME Lynn Dupont

ORGANIZATION'S NAME The Regional Planning Commission for Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany and Tangipahoa Parishes, (RPC)

CONTACT'S POSITION GIS Manager

CONTACT'S ROLE processor

## CONTACT INFORMATION ▶

## PHONE

VOICE 504 483-8500

## ADDRESS

TYPE both

DELIVERY POINT 10 Veterans Blvd.

CITY New Orleans

ADMINISTRATIVE AREA Louisiana

POSTAL CODE 70124

COUNTRY US

E-MAIL ADDRESS ldupont@norpc.org

[Hide Contact information ▲](#)[Hide Metadata Contacts ▲](#)**FGDC Metadata (read-only)** ▼