EV and PHEV 2023 Registrations per Zip Code Tabulation Areas (RPC 2024)

Shapefile

Tags

Electric Vehicle, EV, ZCTA, RPC, NORPC, Clean Cities Coalition, SELACFP

Summary

EV and PHEV 2023 Registration numbers for zip codes in southeast Louisiana to assist with the Clean Cities Coalition EV charger location planning.

Description

The New Orleans Regional Planning Commission (NORPC) staff joined 2023 Electric Vehicle (EV) and Plug-in Hybrid Electric Vehicle (PHEV) registration data to 2020 Zip Code Tabulation Areas (ZCTAs) to create the current layer.

EV and PHEV registration data is sourced from the Louisiana Office of Motor Vehicles (LA OMV) by Experian Automotive. The data has several attributes including fuel type, state, county, and zip code location of registration. Rounded registration counts are created by the National Renewable Energy Laboratory (NREL), Experian Information Solutions. Through NREL's partnership with the U.S. Department of Energy (DOE), this EV registration derived data is made available (upon request) to the 100 Clean Cities Coalition members. The Southeast Louisiana Clean Fuel Partnership, 1 of the 100 Clean Cities in the DOE's Coalition, is housed at the NORPC office.

ZCTAs are a geographic product of the U.S. Census Bureau creation to allow mapping, display, and geographic analyses of the United States Postal Service (USPS) Zone Improvement Plan (ZIP) Code datasets. ZCTAs are generalized areal representations of the geographic extent and distribution of the point-based ZIP Codes built using 2020 Census tabulation blocks. This shared Census geographic boundary allows for Census demographic layers to be reviewed and analyzed in relation to the EV registration layer.

Due to the generalized representations of ZIP Codes to ZCTAs, there is not a 1:1 perfect join between the NREL EV registration per zip code and Census ZCTA polygons. Six unmatched zip codes (70011, 70055, 70073, 70150, 70179, and 70421) accounting for nine EV and five PHEV registrations are not represented in the joined layer for the RPC region. This results in 0.098% of the full data table being unmapped. Four zip codes represent post office box areas, different zip codes than the surrounding residential neighborhoods. The final zip code represents an unpopulated area of Aker, LA (and may belong to a single business). Therefore, it would be safe to assume that these 14 vehicle owners live elsewhere than one of the five unmatched zip codes.

Credits

Rounded registration counts by the National Renewable Energy Laboratory, Experian Information Solutions, 2023
US Census: Zip Code Tabulation Areas, 2020
New Orleans Regional Planning Commission: Joined EV and PHEV registrations per ZCTAs, 2024

Use limitations

This data is for viewing only, not to be downloaded, or used for resale.

In order for the data to be made available for public viewing one or more of the following options were required by NREL:

1. Combine the vehicle in operation (VIO) data from Experian with another data set.

   -RPC joined to ZCTAs

2. Round up to the nearest tenth, hundredth, or thousandth.

   -RPC removed #EVs, #PHEV in the table and created binned categories per type per ZCTA, as shown in the layer legend.

3. Value is represented in a percentage of EV and PHEV based on total vehicle registrations (including all fuel types) in the area [zip code].

Extent
West   -90.813794   **East**   -89.355448
North   31.000439   **South**   29.245866

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

* CONTENT TYPE   Downloadable Data

Hide Topics and Keywords ▲

Citation ▶

TITLE   EV and PHEV 2023 Registrations per Zip Code Tabulation Areas (RPC 2024)
ALTERNATE TITLES   EV and PHEV 2023 Registrations per ZCTAs (RPC 2024)
CREATION DATE   2024-11-04   00:00:00
PUBLICATION DATE   2024-11-05   00:00:00

EDITION DATE   2024-11-04

PRESENTATION FORMATS   * digital map

Hide Citation ▲

Citation Contacts ►

RESPONSIBLE PARTY
  INDIVIDUAL'S NAME Leslie Couvillion
  ORGANIZATION'S NAME   Regional Planning Commission
  CONTACT'S POSITION   GIS Coordinator
  CONTACT'S ROLE   originator

    CONTACT INFORMATION   ►
      PHONE
        VOICE   504-483-8536

      ADDRESS
        TYPE   both
        DELIVERY POINT   10 Veterans Boulevard
        CITY   New Orleans
        ADMINISTRATIVE AREA   LA
        POSTAL CODE   70124
        COUNTRY   US
        E-MAIL ADDRESS   lcouvillion@norpc.org

      HOURS OF SERVICE
        9a-5p CST

    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
    Rounded registration counts by the National Renewable Energy Laboratory, Experian
    Information Solutions, 2023
    US Census: Zip Code Tabulation Areas, 2020
    New Orleans Regional Planning Commission: Joined EV and PHEV registrations per ZCTAs,
    2024

ARCGIS ITEM PROPERTIES
  * NAME   EvRegistration2023PerZcta
  * SIZE   1.914
  * LOCATION   file://\\norpc.org\data\RedBeans\MXDs\Leslie\EvReadinessGuide\AGOL Updated
  Data 2024\EvRegistration2023PerZcta.shp
    * ACCESS PROTOCOL   Local Area Network

Hide Resource Details ▲

Extents ▶

Resource Points of Contact ▶

POINT OF CONTACT
  INDIVIDUAL'S NAME   Leslie Couvillion
  ORGANIZATION'S NAME   Regional Planning Commission
  CONTACT'S POSITION   GIS Coordinator
  CONTACT'S ROLE   point of contact

    CONTACT INFORMATION   ▶
    PHONE
      VOICE   504-483-8536

    ADDRESS
      TYPE   both
      DELIVERY POINT   10 Veterans Boulevard
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      ADMINISTRATIVE AREA   LA
      POSTAL CODE   70124
      COUNTRY   US
      E-MAIL ADDRESS   lcouvillion@norpc.org

    HOURS OF SERVICE
      9a-5p CST

Resource Maintenance ▶

Resource Constraints ▶

CONSTRAINTS
LIMITATIONS OF USE

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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   11258999068426.238
      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)

Spatial Data Properties ▶

VECTOR ▶
* LEVEL OF TOPOLOGY FOR THIS DATASET   geometry only

GEOMETRIC OBJECTS
FEATURE CLASS NAME   EvRegistration2023PerZcta
* OBJECT TYPE   composite
* OBJECT COUNT   81

ARCGIS FEATURE CLASS PROPERTIES ▶
FEATURE CLASS NAME   EvRegistration2023PerZcta
* FEATURE TYPE   Simple
* GEOMETRY TYPE   Polygon
* HAS TOPOLOGY   FALSE
* FEATURE COUNT   81
* SPATIAL INDEX   FALSE
* LINEAR REFERENCING   FALSE

Lineage ▶

LINEAGE STATEMENT

The New Orleans Regional Planning Commission (NORPC) staff joined 2023 Electric Vehicle (EV) and Plug-in Hybrid Electric Vehicle (PHEV) registration data to 2020 Zip Code Tabulation Areas (ZCTAs) to create the current layer.

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Fields ▶

DETAILS FOR OBJECT EvRegistration2023PerZcta ▶
* TYPE   Feature Class
* ROW COUNT   81

FIELD FID ▶
* ALIAS   FID
* 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 FID ▲

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 OBJECTID ▶
* ALIAS   OBJECTID
* DATA TYPE   Integer
* WIDTH   10
* PRECISION   10
* SCALE   0

Hide Field OBJECTID ▲

FIELD ZCTA5CE20 ▶
* ALIAS   ZCTA5CE20

* **DATA TYPE**   String
* **WIDTH**   5
* **PRECISION**   0
* **SCALE**   0

FIELD DESCRIPTION
   U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
   U.S. Census 2020

Hide Field ZCTA5CE20 ▲

FIELD GEOID20 ▶
* **ALIAS**   GEOID20
* **DATA TYPE**   String
* **WIDTH**   5
* **PRECISION**   0
* **SCALE**   0

FIELD DESCRIPTION
   U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
   U.S. Census 2020

Hide Field GEOID20 ▲

FIELD GEOIDFQ20 ▶
* **ALIAS**   GEOIDFQ20
* **DATA TYPE**   String
* **WIDTH**   14
* **PRECISION**   0
* **SCALE**   0

FIELD DESCRIPTION
   U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
   U.S. Census 2020

Hide Field GEOIDFQ20 ▲

FIELD CLASSFP20 ▶
* **ALIAS**   CLASSFP20
* **DATA TYPE**   String
* **WIDTH**   2
* **PRECISION**   0
* **SCALE**   0

FIELD DESCRIPTION
   U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
   U.S. Census 2020

Hide Field CLASSFP20 ▲

FIELD MTFCC20 ▶

* ALIAS   MTFCC20
* DATA TYPE   String
* WIDTH   5
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
    U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
    U.S. Census 2020

Hide Field MTFCC20 ▲

FIELD FUNCSTAT20 ►
* ALIAS   FUNCSTAT20
* DATA TYPE   String
* WIDTH   1
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
    U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
    U.S. Census 2020

Hide Field FUNCSTAT20 ▲

FIELD ALAND20 ►
* ALIAS   ALAND20
* DATA TYPE   Double
* WIDTH   19
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
    U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
    U.S. Census 2020

Hide Field ALAND20 ▲

FIELD AWATER20 ►
* ALIAS   AWATER20
* DATA TYPE   Double
* WIDTH   19
* PRECISION   0
* SCALE   0
FIELD DESCRIPTION
    U.S. Census ZCTA Attribute

DESCRIPTION SOURCE
    U.S. Census 2020

Hide Field AWATER20 ▲

FIELD INTPTLAT20 ▶
  * ALIAS   INTPTLAT20
  * DATA TYPE   String
  * WIDTH   11
  * PRECISION   0
  * SCALE   0
  FIELD DESCRIPTION
    U.S. Census ZCTA Attribute

  DESCRIPTION SOURCE
    U.S. Census 2020

  Hide Field INTPTLAT20 ▲

FIELD INTPTLON20 ▶
  * ALIAS   INTPTLON20
  * DATA TYPE   String
  * WIDTH   12
  * PRECISION   0
  * SCALE   0
  FIELD DESCRIPTION
    U.S. Census ZCTA Attribute

  DESCRIPTION SOURCE
    U.S. Census 2020

  Hide Field INTPTLON20 ▲

FIELD ZipCode ▶
  * ALIAS   ZipCode
  * DATA TYPE   Integer
  * WIDTH   10
  * PRECISION   10
  * SCALE   0
  FIELD DESCRIPTION
    Zip Code of each EV or PHEV 2023 registration.

  DESCRIPTION SOURCE
    NREL 2023

  Hide Field ZipCode ▲

FIELD EvRounded ▶
  * ALIAS   EvRounded
  * DATA TYPE   String
  * WIDTH   10
  * PRECISION   0
  * SCALE   0
  FIELD DESCRIPTION
    Binned categories of number EV registrations per ZCTA.

  DESCRIPTION SOURCE
    NORPC 2024

  Hide Field EvRounded ▲

FIELD PhevRounde ▶
   ALIAS PhevRounded
   * DATA TYPE String
   * WIDTH 10
   * PRECISION 0
   * SCALE 0
   FIELD DESCRIPTION
      Binned categories of number PHEV registrations per ZCTA.

   DESCRIPTION SOURCE
      NORPC 2024

   Hide Field PhevRounde ▲

FIELD Rpc_Parish ▶
   ALIAS RpcParish
   * DATA TYPE String
   * WIDTH 35
   * PRECISION 0
   * SCALE 0
   FIELD DESCRIPTION
      Name of the NORPC region parish.

   DESCRIPTION SOURCE
      NORPC 2024

   Hide Field Rpc_Parish ▲

Hide Details for object EvRegistration2023PerZcta ▲

Hide Fields ▲

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   2024-11-27

   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   2024-11-26   16:04:30
      LAST MODIFIED IN ARCGIS FOR THE ITEM   2024-11-27   10:27:07

      AUTOMATIC UPDATES
         HAVE BEEN PERFORMED   Yes
         LAST UPDATE   2024-11-27   10:26:56

Hide Metadata Details ▲

Metadata Contacts ▶

METADATA CONTACT
  INDIVIDUAL'S NAME Leslie Couvillion
  ORGANIZATION'S NAME Regional Planning Commission
  CONTACT'S POSITION GIS Coordinator
  CONTACT'S ROLE point of contact

    CONTACT INFORMATION ▶
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      TYPE both
      DELIVERY POINT 10 Veterans Boulevard
      CITY New Orleans
      ADMINISTRATIVE AREA LA
      POSTAL CODE 70124
      COUNTRY US
      E-MAIL ADDRESS lcouvillion@norpc.org

     HOURS OF SERVICE
      9a-5p CST

    Hide Contact information ▲

Hide Metadata Contacts ▲

Metadata Maintenance ▶

MAINTENANCE
  UPDATE FREQUENCY as needed

Hide Metadata Maintenance ▲

FGDC Metadata (read-only) ▼