User Guide & Codebook

abortiondistances_countyxmonth_2009to2021

Caitlin Myers, Middlebury College

Vintage June 1, 2021

User Guide

The data abortiondistances_countyxmonth_2009to2021, uploaded to OSF in Stata and CSV formats, is a panel of United States county-by-month distances to the nearest abortion provider. These data were prepared and published by Caitlin Myers at Middlebury College for academic research purposes. Please cite these data using the indicated citation at OSF:

> Caitlin Myers. 2021. County-by-month travel distances to nearest abortion provider, Vintage June 1, 2021. Retrieved from osf.io/pfxq3. [add doi]

These data are based on the Myers Abortion Facility Database,[1] a restricted-use dataset I have created and documented separately at OSF. This database identifies the names and addresses of all facilities—including private physician offices, hospitals, and freestanding clinics—that publicly advertised the provision of abortion services or are otherwise likely to be identifiable to a large fraction of women seeking an abortion. This database is not intended to capture private physicians and hospitals that provide a small number of abortions each year and do not advertise their services. The database covers the period January 1, 2009 through June 1, 2021 for all states.

To generate distances, I first geocode the locations of abortion facilities using their street addresses and the Stata georoute module, which relies on the HERE API.[2] I then use the Stata geonear module to identify the nearest 30 facilities by geodetic distance.[3] I treat these 30 facilities as candidates for the nearest facility by travel distance, which takes into account road networks and traffic conditions. Using the georoute module, I identify the nearest facility by travel distance and also calculate average travel time to this facility.

The data record the location (city, county, and state) of the nearest facility by geodetic distance and the geodetic distance to this facility. The data also record the location (city, county, and state) of the nearest facility by travel distance and the travel distance and travel time to this facility.

Notes:

Due to the limited nature of road networks in Alaska and Hawaii, travel distances are not calculated for counties and county-equivalents in these states.

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[1] Caitlin Myers. 2021. Myers Abortion Facility Database (Restricted), Vintage June 1, 2021. Retrieved from osf.io/tj4ud.

[2] Sylvain Weber & Martin Péclat, 2016. "GEOROUTE: Stata module to calculate travel distance and travel time between two addresses or two geographical points," Statistical Software Components S458264, Boston College Department of Economics, revised 28 Apr 2020.

[3] Robert Picard, 2010. "GEONEAR: Stata module to find nearest neighbors using geodetic distances," Statistical Software Components S457146, Boston College Department of Economics, revised 14 Sep 2019.

Introduction

Travel distances are calculated using the HERE API. In future releases of these data, travel distances between the same two points can change due to evolving road networks and traffic conditions. Therefore all travel distances for the entire panel will be recalculated in future releases. Users should not simply append newly-added months, but replace the entire data set as new vintages become available.

If you believe you have found an error in the data, please contact Caitlin Myers at cmyers@middlebury.edu.

Codebook

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origin_fips_code
Origin county fips code

type: string (str5)

unique values: 3,108 missing "": 0/466,200

examples: "17121"
"26093"
"37017"
"47185"

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origin_county_name
Origin county name

type: string (str48), but longest is str32

unique values: 3,108 missing "": 0/466,200

examples: "Conway County (AR)"
"Henry County (TN)"
"Mellette County (SD)"
"San Patricio County (TX)"

warning: variable has embedded blanks

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monthlydate
Monthly date
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                type:  numeric monthly date (float)

               range:  [588,737]                    units:  1
       or equivalently:  [2009m1,2021m6]            units:  months
         unique values:  150                    missing .:  0/466,200

                mean:     662.5 = 2015m3 (+ 15 days)
            std. dev:   43.3004

          percentiles:        10%       25%       50%       75%       90%
                             602.5       625     662.5       700     722.5
                           2010m3    2012m2    2015m3    2018m5    2020m3

-------------------------------------------------------------------------------
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month
Calendar month
-------------------------------------------------------------------------------
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                type:  numeric (float)

               range:  [1,12]                       units:  1
         unique values:  12                     missing .:  0/466,200

                mean:      6.38
            std. dev:   3.44997

          percentiles:        10%       25%       50%       75%       90%
                                2         3         6         9        11

-------------------------------------------------------------------------------
--------------------------
year
Calendar year
-------------------------------------------------------------------------------
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                type:  numeric (float)

               range:  [2009,2021]                  units:  1
         unique values:  13                     missing .:  0/466,200

                mean:   2014.76
            std. dev:    3.6142

          percentiles:        10%       25%       50%       75%       90%
                             2010      2012      2015      2018      2020
```

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-------------------------------------------------------------------------------
origin_county_pop                                   Population of women
aged 15-44 in origin_county
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                  type:  numeric (double)

                 range:  [9,2190548]                  units:  1
         unique values:  17,299                   missing .:  0/466,200

                  mean:   20257.5
             std. dev:   69368.3

           percentiles:        10%       25%       50%       75%       90%
                               788      1844      4542     12540     40543

-------------------------------------------------------------------------------
gd                                                  Geodesic distance to
nearest abortion facility (miles)
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                  type:  numeric (double)

                 range:  [.08309973,319.64082]        units:  1.000e-10
         unique values:  6,824                    missing .:  0/466,200

                  mean:   60.6793
             std. dev:   50.7897

           percentiles:        10%       25%       50%       75%       90%
                             7.2395    26.155    49.676   79.5205   121.715

-------------------------------------------------------------------------------
gd_city                                             City of nearest abortion
facility by geodesic distance
-------------------------------------------------------------------------------

                  type:  string (str20)

         unique values:  500                      missing "":  0/466,200

              examples:  "Colorado Springs"
                         "Greensboro"
                         "Memphis"
                         "Salt Lake City"

               warning:  variable has embedded blanks
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```
-------------------------------------------------------------------------------
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gd_state                                          State of nearst abortion
facility by geodesic distance
-------------------------------------------------------------------------------
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                  type:  string (str2)

         unique values:  49                       missing "":  0/466,200

              examples:  "IA"
                         "MI"
                         "NM"
                         "TN"

-------------------------------------------------------------------------------
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gd_fips_code                                Fips code of nearest abortion
facility by geodesic distance
-------------------------------------------------------------------------------
-------------------------

                  type:  string (str5)

         unique values:  404                      missing "":  0/466,200

              examples:  "16083"
                         "26055"
                         "37119"
                         "47157"

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td                                                Travel distance to
nearest abortion facility (miles)
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                  type:  numeric (float)

                 range:  [.17646942,383.57245]        units:  1.000e-08
         unique values:  6,715                    missing .:  0/466,200

                  mean:   76.3702
             std. dev:   61.9165

           percentiles:        10%       25%       50%       75%       90%
                            10.3222    34.273   62.9468   99.9587   153.999

-------------------------------------------------------------------------------
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tt                                                          Travel time
to nearest abortion facility
```

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-------------------------------------------------------------------------------
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                  type:  numeric (float)

                 range:  [1.1166667,369.51666]        units:  1.000e-07
         unique values:  5,073                    missing .:  0/466,200

                  mean:   85.9789
             std. dev:   59.3632

           percentiles:        10%       25%       50%       75%       90%
                            19.4833   45.0333     74.25   112.583   162.383

-------------------------------------------------------------------------------
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td_city                                                                City
of nearest abortion facility
-------------------------------------------------------------------------------
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                  type:  string (str20)

         unique values:  509                      missing "":  0/466,200

              examples:  "Columbia"
                         "Greenville"
                         "Memphis"
                         "Salt Lake City"

               warning:  variable has embedded blanks

-------------------------------------------------------------------------------
--------------------------
td_state                                                               State
of nearst abortion facility
-------------------------------------------------------------------------------
--------------------------

                  type:  string (str2)

         unique values:  49                       missing "":  0/466,200

              examples:  "IA"
                         "MI"
                         "NM"
                         "TN"

-------------------------------------------------------------------------------
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td_fips_code                                                     Fips code
of nearest abortion facility
-------------------------------------------------------------------------------
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```

```
          type:  string (str5)

unique values:  408                     missing "":  0/466,200

      examples:  "16083"
                 "26049"
                 "37081"
                 "47157"
```