# Source Index

ACS – American Community Survey

This is from the census.gov which is free and open source.

For all variables from this set we used the 5-year average from 2014-2018.

Steps to find ACS data:

* Data.census.gov
* Search on ACS
* Then search on variable
* Then customize table
* Then pick the Georgia / counties under geographies
* Then download (DP05 – 5 -year)

## Emissions & Generation Resource Integrated Database (eGRID)

<https://www.epa.gov/egrid/emissions-generation-resource-integrated-database-egrid>

This data was released on 1/28/2020

The Emissions & Generation Resource Integrated Database (eGRID) is a comprehensive source of data on the environmental characteristics of almost all electric power generated in the United States. These environmental characteristics include:

* air emissions for nitrogen oxides, sulfur dioxide, carbon dioxide, methane, and nitrous oxide;
* emissions rates;
* net generation;
* resource mix; and
* many other attributes.

eGRID data can be used for the following activities:

* greenhouse gas registries and inventories,
* carbon footprints,
* consumer information disclosure,
* emission inventories and standards,
* power market changes, and
* avoided emission estimates.

## World Resources Institute

<https://www.wri.org/resources>

WRI produces **maps, charts, data sets, infographics, and other visual resources** as part of our commitment to turn “information into action.” These products are based on our data and research, which are held to traditional [academic standards of excellence](https://www.wri.org/publications/excellence), including objectivity and rigor.

* Global power plan database - <https://datasets.wri.org/dataset/540dcf46-f287-47ac-985d-269b04bea4c6>

## Homeland Infrastructure Foundation-Level Data (2019)

<https://hifld-geoplatform.opendata.arcgis.com/>

This site provides National foundation-level geospatial data within the open public domain that can be useful to support community preparedness, resiliency, research, and more. The data is available for download as CSV, KML, Shapefile, and accessible via web services to support application development and data visualization.

There is a spreadsheet of all available data sources (HIFLD\_2020DataCatalog). Some are restricted, some are FOUO. Below are the interesting ones that have No Access Constraints.

* Emergency services – from American Red Cross
* Child Care Centers
* College and University Campuses
* Congressional Districts
* Data Coverage
* EMS Stations
* Kidney Dialysis Centers
* Local Law Enforcement Locations
* Hospitals
* Industrial Mining Operations
* National Forests
* National marine Fisheries Services
* Nursing Homes
* Public Schools
* Public Health Departments
* Urgent Care Facilities

## CDC Behavioral Risk Factor Surveillance System

<https://www.cdc.gov/brfss/index.html>

<https://www.cdc.gov/chronicdisease/data/surveillance.htm?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fchronicdisease%2Fstats%2Findex.htm>

I downloaded the .ASC with all BRFSS data. I think this is what we want for all the health indicators.

There is a Chronic Disease Data page - <https://www.cdc.gov/chronicdisease/data/statistics.htm>

* Hypertension
* Heart disease - <https://www.cdc.gov/dhdsp/maps/dtm/index.html>
* Diabetes - <https://www.cdc.gov/diabetes/data/index.html>
* High Cholesterol
* Cancer - <https://www.cdc.gov/cancer/dcpc/data/>
* Depression
* HIV
* Health Indicators Study –
  + <https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html>
  + <https://nccd.cdc.gov/dnpao_dtm/rdPage.aspx?rdReport=DNPAO_DTM.ExploreByLocation&rdRequestForwarding=Form>
  + It says these are all from the BRFSS
* Alcohol - <https://www.cdc.gov/alcohol/data-stats.htm>
* Obesity - <https://www.cdc.gov/nccdphp/dnpao/division-information/data-stats/index.htm>
* Smoking - <https://www.cdc.gov/tobacco/data_statistics/index.htm>

Chronic Disease indicators - <https://www.cdc.gov/cdi/index.html>

## CDC – National Center for Health Statistics

<https://data.cdc.gov/browse?category=NCHS>

## Policy Map

<https://www.policymap.com/>

This is a subscription service – that I think takes from a lot of open source sites and compiles in a nice way.

## Election results – from GA Secretary of State Website

<https://sos.ga.gov/index.php/Elections/current_and_past_elections_results>

2016 general election - <https://results.enr.clarityelections.com/GA/63991/184321/en/reports.html#>

# NOTES and DRAFTS

Below this is a running commentary on potential data sources.

**Social Map**

A close up of a map

Description automatically generated

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Source/Year** | **Final Decisions** |
| Total Population | Per Square Mile | ACS 2018 (5-Year Estimate) | x |
| Sex | Male/Female | ACS 2018 (5-Year Estimate) | x |
| Age | Several Categories | ACS 2018 (5-Year Estimate) | x |
| Race | Several Categories | ACS 2018 (5-Year Estimate) | x |
| Environmental Health Index | Summarizes potential exposure to harmful toxins at a neighborhood level. Potential health hazards exposure is a linear combination of standardized EPA estimates of air quality carcinogenic (c), respiratory (r) and neurological (n) hazards with indexing census tracts. | US Department of Housing and Urban Development (2018) | x |
| Power Plants | Shows sports on the map for Solar, Wind, Hydroelectric, Biomass, Coal, Natural Gas, Geothermal, Nuclear, Other | [The Emissions & Generation Resource Integrated Database (eGRID)](https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid)  (2018) | x |
| Population Employment Status | Employed/Unemployed | ACS 2018 (5-Year Estimate) | x |
| Labor Force | Percentage of Participation | ACS 2018 (5-Year Estimate) | x |
| Unemployment Rate/Status | Percentage | ACS 2018 (5-Year Estimate) |  |
| Household Income | Ranked on heat map by population | ACS 2018 (5-Year Estimate) | x |
| Access to Health Insurance | Ranked on heat map by population | ACS 2018 (5-Year Estimate) | x |
| Highest Educational Attainment | High School Diploma, Associate’s, Bachelor’s, Master’s, PhD | ACS 2018 (5-Year Estimate) | ??? |
| Parks and Open Space | This layer presents parks, gardens, and forests within the United States at national, state, county, regional, and especially local levels. | Esri, TomTom North America, Inc. (2010) |  |
| Public Housing Buildings | Public housing was established to provide decent and safe rental housing for eligible low-income families, the elderly, and persons with disabilities. Public housing comes in all sizes and types, from scattered single-family houses to high-rise apartments for elderly families | Public Housing Buildings (2019) |  |
| Water Stress | This database enables comparison of water-related risks across large geographies to identify regions or assets deserving of closer attention. | World Resources Institute (2019) |  |
| Emergency Medical Service Stations | This includes ambulance, fire, and rescue services. | Homeland Infrastructure Foundation-Level Data (2019) |  |
| Urgent Care Facilities | Data points on the map showing accessibility in rural and urban areas here. | Homeland Infrastructure Foundation-Level Data (2004-2009) |  |
| Hospitals | Data points on the map showing accessibility in rural and urban areas here. | Homeland Infrastructure Foundation-Level Data (2019) |  |
| Nursing Homes | Data points on the map showing accessibility in rural and urban areas here. | Homeland Infrastructure Foundation-Level Data (2019) |  |
| Child Care Centers | Data points on the map showing accessibility in rural and urban areas here. | Homeland Infrastructure Foundation-Level Data (2019) |  |
| Ecoregional Portfolio | Quantifying the conservancy of ecological systems and natural communities (freshwater, marine, terrestrial, etc.) | The Nature Conservancy (2011) |  |
| Fast Food Locations? | 9 of the U.S’s most popular food chains | 2019 |  |
| Biome Regions? | Color Coding of different biomes | The Nature Conservancy (2018) |  |
| Biodiesel Plants | Biodiesel is a renewable fuel made from biomass. | BioDiesel Plants (2019) |  |

**Policy Map**

A close up of a map

Description automatically generated

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Description** | **Source/Year** | **Final Decision** |
| Religion | Total Adherents/1,000 People | ASARB (2000) | x |
| Life Expectancy | At Birth (Years) | CDC (2010-2015) | x |
| Community Health Centers | Data Points on the Map | HRSA |  |
| Elections—Percentage of Votes for Democrats | Percentage | US Election Atlas (2010) | x |
| Elections—Percentage of Votes for Republicans | Percentage | US Election Atlas (2010) | x |
| People in Poverty | Percentage | Census Tract (2010) | x |
| Families in Poverty | Percentage | Census Tract (2010) |  |
| Persistent Poverty | Percentage | Census Tract (2010) |  |
| Health Status-Chronic Conditions | You have to pick *one* out of many… For Clarkston, for example, we could pick heart disease. | PolicyMap and CDC BRFSS (2010)  Information from 2017 |  |
| Health Status-Infectious Disease | You must pick one | CDC (Every Year) |  |
| Health Status-Cancer | All cancers (rate) | CDC (2011-2015) |  |
| Computer Access | Percentage | Census (2010)  For years 2014-2018 |  |
| Internet Access | Percentage | Census (2010)  For years 2014-2018 |  |
| Homelessness | Rate | HUD (Every Year) | x |
| Elections—Senate | Choose From:  Margin of Victory, Democrat, Republican | HUD (Every Year) | x |
| Elections—House of Representatives | Choose From:  Margin of Victory, Democrat, Republican | HUD (Every Year) | x |
| Elections—General Voter Turnout | Voter Turnout Percentage | U.S. Election Atlas (2016, 2012, 2008, 2004) | x |
| Nonprofits | Points on the map | NCCS |  |

**All About Policy Landscape**

**Demographics Section**

(Race, Religion, Income Level, Employment Sector, Demoractic/Republican Voting History, Rural/Urban, Power Plants, Public Health Core-- asthma/air quality/etc., School District Spending)

**Policy Makers Section**

(Race, Religion, Age Group, Gender, Party, Voting History on Bills (for specific policy areas)

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Data Sources to Use

**Demographics Section and Policy Makers Resources**

| **Data Source** | **Link and Info** | **Why Is This Useful?** | **Data Format File?** | **General Comments:** | **Additional Notes** | **Rating:** |
| --- | --- | --- | --- | --- | --- | --- |
| United States Census Bureau | <https://www.census.gov/data.html>  <https://www.census.gov/quickfacts/fact/table/US/PST045219>  <https://www.census.gov/data/tables/2019/demo/income-poverty/p60-266.html>  (Income + Poverty Specific)  <https://www.census.gov/data-tools/demo/saipe/#/?map_geoSelector=aa_c&s_state=13>  (Estimates by county in Georgia)  <https://www.census.gov/quickfacts/GA> (GA!!) | “Quickfacts” Section!: Base Year starts at 2019 and provides most important data.  American Fact Finder -- would be amazing but I actually could not find this website.... I’m not sure if they renamed their domain? | -API  -Excel download of data from American Fact Finder (.zip file)  -R can also be used  -3rd Hyperlink will allow you to download data into PDF or CSV format | -Annual Updates on Race, General Income and Poverty Information (2014-2018), Health (Disability and Persons w/o Health Insurance Stat)  -You can use specific “Data Tools” to open up sublinks for the United States (U.S. Gazetteer for geographic codes, Income and Poverty Interactive Data Tool, My Congressional District) | You can request a key for API. The Quickfacts sheet also has individual hyperlinks for individual sources in the U.S. Census Bureau website.  Years of collection are generally ranging from 2014-2018. | 3.5/5-- Does give general state demographic but not country specific. |
| U.S. Bureau of Labor Statistics | <https://www.bls.gov/eag/eag.ga.htm>  <https://www.bls.gov/data/#employment>  (BEST FOR RETRIEVING TABLES) | Provides information on many strata of the economy (we might want to see employment and unemployment sections) | What this website is best for would be for a general state overview on the economy rather than state/county-based analysis. | The issue presented here is that data will populate by monthly changes rather than annual. | A screenshot of a cell phone  Description automatically generated | 2.5/5-- Difficult to manage by specific counties. Will require lots of data manipulation. |
| Georgia GIS Clearinghouse | <https://data.georgiaspatial.org/index.asp?body=search&county=&theme=Climate&location=Georgia&scale=0&origin=Georgia+GIS+Data+Clearinghouse&keyword=&startdate=1950&enddate=2020&format=&submit=Run+Search> | Map Data and Aerial Photography  Provides climate, cultural, demographic, education, environmental, flood, geology, and health layers. | Depends on what the data search query pulls up. You can either have data sets available from an external site, or for purchase. | Will need to figure out how to use this website. As of now, nothing is pulling up in the data search. | Sign-up/Log-In is required-- I have already made one for free. | 2-5-- Has a lot of potential but won’t even pull results from my data queries for some reason... |
| National Center for Health Statistics from Centers for Disease Control and Prevention (NCHS at CDC) | <https://data.cdc.gov/browse?category=NCHS> | Health-- I have found files on healthcare access trends and overall coverage. | You can download a CSV file in general or through Microsoft Excel. | Data has been collected from 1995-2010. There are 8 options for downloading copies... | Public | 2/5 -- Great national resource but won’t give you good trends in Georgia over time. Better as a reference |
| Georgia Governor’s Office of Planning and Budget | <https://opb.georgia.gov/social-and-economic-data>  <https://opb.georgia.gov/population-projections-visualization>  (Populations Projection Visualization) | Census Data in simple Excel spreadsheets. | Yes. Click the file that you want and the Excel file opens up. | Data collection has been going from 2010-2019.  Population estimates are bound from 2016-2019.  Social/Economic data is from 2010/2011. | Public Data-- no sign-up/log-in required  It has data on population projections…. One of the first times I am seeing this and could consider including it in data set. | 4.5 -- The data is actually really easy to download and saves us time in terms of culmination. Merging shouldn’t be too difficult. |

**Software and Programs To Consider:**

| **Name** | **Price/Sign Up** | **Information** | **Downloadable File?** | **Notes:** |
| --- | --- | --- | --- | --- |
| Policy Map  ([www.policymap.com](http://www.policymap.com)) | Free for me-- UGA students have access to the free license by using plain logins | Exhaustive Amount of Information to Use Here!  Encompasses all aspects we can think of in here and is one of the best resources I could possibly find. | Yes! Downloads turn into CSV files and can be used for further manipulation.  That being said, certain data layers are sometimes not downloadable due to license restrictions or other miscellaneous circumstances. We will have to be mindful about this moving forward. | SimplyAnalytics is also very similar… Just something to consider. |
| Social Explorer-- offers more historical data  (<https://www.socialexplorer.com/explore-maps>) | Typically, pricing starts at $100 for individuals. That being said, as students, you can try to get a 60-day free trial. There is also a 14-day free trial for general professional accounts.  UPDATE: I made another account for free! | Also includes Census information and many layers for each state.  Something really incredible about this program is that it allows for you to select certain locations or institutions that will populate on the map. That includes urgent care facilities, airports, college/university institutions, waste facilities, etc. These are all color coded on a map and show amazing information. | Yes! The program is quite multifaceted and will allow for reports and maps. The *reports* are able to be downloaded into CSV files into Excel. Maps can be saved onto your dashboard or as an image. | You can change your base year which is really helpful for us. |
| [Data.census.gov](https://data.census.gov/cedsci/)  (Affiliate Site of the Census Bureau)-- offers greater breadth of recent data (2018) | Does **not** require a login and is public domain. Anyone should be able to play around with data without needing a login. | Allows for edits about what topics should be included into the demographics. | Yes! Able to download into CSV files. | Survey lead in affiliation with the American Community Survey program.  <https://data.census.gov/cedsci/profile?g=0400000US13&q=Georgia> (Georgia’s Individual Profile) |
| **Interuniversity Consortium for Political and Social Research**  **(**[**https://www.icpsr.umich.edu/web/pages/**](https://www.icpsr.umich.edu/web/pages/)**)** | While there are many institutions that are included in licensing, it seems that there isn’t much issue accessing data subsets. I have simply made an account with my university login. | You can divide data by geography. After typing this into the search results, I have received 5,069 results to choose from. Dates vary for all studies and will need to be filtered through. | Majority of files are accessible by the general public. Some files *do* have special restrictions and cannot be downloaded directly from the website. | Results also vary between public opinion pieces, demographic characteristics, and census data. |
| **Gap Minder**  **(gapminder.org)** | No log-in required. | This website has much more in-depth and comprehensive information about topics that could be of interest to us. These topics are also shown as a time lapse but might be better for general conceptualization compared to actual use of data. | Downloads primarily seem to be regarding screenshots of the map, but the website indicates that a data file can be accessed as well. These files can be downloaded into Excel (xls), Open Office (ods), or PDF files. | Just played around with this and realized that GapMinder does NOT allow for individual state lookups in the U.S. North America is its own entity…. |
| Georgia Demographics by Cubit  ([www.georgia-demographics.com](http://www.georgia-demographics.com)) | $49 membership for data-- offers spreadsheet and radius reports. | Has the most current Georgia data from the US Census Bureau…. Site mentions from 2018.  This information is much more specific to Georgia’s counties, cities, and zip codes unlike other sources I have found. | Instant Download into an Excel file. | Honestly does not seem worth a single penny. The U.S. Census Bureau is able to provide you all this data as well. It might just take me a little longer to merge all files but there shouldn’t be any reason to do this. |
| Georgia Bills @ GovTrack.us  (<https://www.govtrack.us/congress/bills/subjects/georgia/6536>) | You can just log-in/create an account with a Facebook or Gmail profile. Other than that, it seems free. | This website is really useful in understanding the “meat” of bills passed from ***Congress***. It is much easier to sift through the bills and determine which ones are pro-science or not by using their drop-boxes to identify the *subject*. | I’m not sure if we need to be able to download a file, but I don’t see any way to merge all files together into a comprehensive list. I would have to make a running list of this. | Divided between House and Senate and explains prognosis for each individual bill that has been enacted. Even if it hasn’t been enacted, you can also check its “status.” |
| Openstates.org  (<https://openstates.org/ga/>) | You can log-in or sign-up to be a member. | Provides easy statistics about the most basic information that can be offered regarding the Georgia General Assembly. They also have a mass showing of bills and what their status is. | You can develop the data through GitHub, Bulk Data, and through API programming (code).  Majority of them come into CSV or YAML Schema files. | There are many helpful data dumps here for bills and votes, legislators, geographic information, and legacy! |
| Legiscan  <https://legiscan.com/GA> | Log-In is required. | Focuses on Georgia’s General Assembly; talks about how to track bills and what representatives often vote for things as well as top committees. | Using the new getDataset API hooks, a manually downloaded copy of a weekly Public Datasets, or a custom subscriber bulk-load snapshot. |  |

Additional Websites to Consider:  
<http://www.legis.ga.gov/Legislation/en-US/default.aspx> (Can do advanced search on legislation)

<https://census.georgia.gov/census-101/census-quick-facts/political-representation> (does not have a great breadth of information though)

<https://libguides.law.gsu.edu/c.php?g=253377&p=1689696> (EXTREMELY USEFUL as legislative research guide)

<https://www.census.gov/content/dam/Census/library/publications/2011/dec/c2010br-08.pdf> (Focuses on apportionment)

<https://www.census.gov/2010census/data/apportionment-data-map.html> (Downloadable files)

<https://www.esri.com/arcgis-blog/products/arcgis-living-atlas/mapping/top-10-tips-for-policy-mapping/>

**Power BI Tutorial**

* Dashboards contain data from many sources at an “at-a-glance” view.
* Reports let you do detailed analysis.
* <https://docs.microsoft.com/en-us/power-bi/guided-learning/>
  + Steps towards getting some help…
* Workspace can be used through the SharePoint data that we use at Sci4Ga.
* Drag and drop data visualizations onto the dashboard to start creating visuals.
* Transformations!! Need to have a comprehensible format for the information (similar to Tableau drop-boxes you used before)