DOMAIN - COMMUNITY FUNCTIONING:

- **Communications**
  1. Telephone Service
     Data Filter: ACS 5-Year Estimates; All counties; No telephone service available
     Data processing Method: Appendix A - Census Data
  2. Internet Service
     Data Filter: ACS 5-Year Estimates; All counties; With an internet subscription
     Data processing Method: Appendix A - Census Data
  3. Employment Level
     Data Filter: ACS 1-Year Estimates; All counties; Over 16 in labor force employed
     Data processing Method: Appendix A - Census Data
  4. Business Establishments
     https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
     Data Filter: ACS 5-Year Estimates; All counties;
     Data processing Method: Appendix A - Census Data
  5. Banking Establishments
     https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
     Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 522110
     Data processing Method: Appendix A - Census Data
  6. Median Income
     https://data.census.gov/cedsci/table?q=DP03&t=Income%20and%20Poverty&g=010000
     0US%240500000&tid=ACSDP5Y2020.DP03
     Data Filter: ACS 5-Year Estimates; All counties
     Data processing Method: Appendix A - Census Data
  7. Paid Employees
     https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000

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https://www.copewellmodel.org/
Data Filter: ACS 5-Year Estimates; All counties
Data processing Method: Appendix A - Census Data

**Education**
8. Colleges, Universities, and Professional Schools
   https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
   Data Filter: ACS 5-Year Estimates; All counties; NAICS code 6113
   Data processing Method: Appendix A - Census Data
9. Pupil/Teacher Ratio
   Data Filter: County Data; 2020-21; Teacher/Staff Information; Pupil/Teacher Ratio
   Data processing Method: Appendix A - NCES Data

**Food and Water**
10. Food Environment Index
    Data processing Method: Appendix A - County Health Rankings
11. Housing Units Lacking Complete Plumbing Facilities
    Data Filter: ACS 5-Year Estimates; All counties
    Data processing Method: Appendix A – Census Data

**Government**
12. County Infrastructure Expenditures
    https://ce.naco.org/?dset=County%20Expenditures&ind=Infrastructure%20Expenditures
    Data processing Method: Appendix A – NACo Data
13. Justice and Public Safety Expenditures
    https://ce.naco.org/?dset=County%20Expenditures&ind=Infrastructure%20Expenditures
    Data processing Method: Appendix A – NACo Data

**Healthcare and Public Health**
14. Number of Hospital Beds
    https://data.hrsa.gov/data/download
    Data processing Method: Appendix A – HRSA Data
15. Population with Health Insurance
    Data Filter: ACS 5-Year Estimates; All counties
    Data processing Method: Appendix A – Census Data
16. PHAB Accreditation
    https://phaboard.org/accreditation-recognition/accreditation-activity/
    Data processing Method: Appendix A – PHAB Data

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https://www.copewellmodel.org/
17. Healthcare Support
   Data Filter: ACS 5-Year Estimates; All counties; Employment in health care support
   Data processing Method: Appendix A – Census Data

- **Housing**
  18. Crowding
     Data Filter: ACS 5-Year Estimates; All counties; Occupied housing units/households with over 1 person/room
     Data processing Method: Appendix A – Census Data
  19. Severe Housing Problems
     https://www.countyhealthrankings.org/app/alabama/2022/overview
     Data processing Method: Appendix A – County Health Rankings
  20. Spending on Housing
     https://data.census.gov/cedsci/table?q=CP04&tid=ACSCP5Y2020.CP04
     Data Filter: ACS 5-Year Estimates; All counties; Households spending over 30% of income on housing
     Data processing Method: Appendix A – Census Data

- **Nurturing and Care**
  21. Number of Nursing Homes
     https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
     Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 623
     Data processing Method: Appendix A - Census Data
  22. Pre-Kindergarten Enrollment in Public School
     Data Filter: County Data; 2020-21; Enrollments; Enrollment by Grade; Prekindergarten Students [Public School]
     Data processing Method: Appendix A - NCES Data
  23. Pre-Kindergarten Enrollment in Public School
     Data Filter: ACS 5-Year Estimates; All counties; 3-4 years old enrollments
     Data processing Method: Appendix A – Census Data

- **Transportation**
  23. Public Transportation Use
     Data Filter: ACS 5-Year Estimates; All counties;
     Data processing Method: Appendix A – Census Data

- **Wellbeing**
  24. Fitness and Recreational Sports Centers
     https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000

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https://www.copewellmodel.org/
25. Arts and Entertainment
https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000

26. Nearby Parks (community design | access to parks and public elementary schools | number of people living within a half mile of a park | all counties)
https://ephtracking.cdc.gov/DataExplorer/#/

27. Recent Hazard Mitigation Plan (Hazard Mitigation Plan Statuses)
https://www.fema.gov/about/openfema/data-sets

28. First Responders

29. Influenza Vaccination Rates
https://www.countyhealthrankings.org/app/alabama/2022/overview

30. Pharmacies Enrolled in EPAP
https://www.phe.gov/Preparedness/planning/national-plus/Pages/NationalPlus.aspx

31. Average Age of Housing Stock

32. Bridges with Structural Deficiencies
https://www.fhwa.dot.gov/bridge/nbi/no10/county21.cfm

33. Persons Living in Poverty

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Data processing Method: Appendix A - Census Data

**Inequality**
34. Gini Index of Income Inequality
   Data Filter: ACS 1-Year Estimates; All counties
   Data processing Method: Appendix A - Census Data

**Vulnerability**
35. Population Under Age 5 or 65 Years of Age or Over
   https://data.census.gov/cedsci/table?q=dp05&tid=ACSDP5Y2020.DP05
   Data Filter: ACS 5-Year Estimates; All counties
   Data processing Method: Appendix A - Census Data
36. Population with Disability
   Data Filter: ACS 5-Year Estimates; All counties
   Data processing Method: Appendix A - Census Data

**DOMAIN - RESOURCES FOR RECOVERY:**
37. Highway, Street, and Bridge Construction
   https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
   Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 2373
   Data processing Method: Appendix A - Census Data
38. Architectural, Engineering, and Related Establishments
   https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
   Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 5413
   Data processing Method: Appendix A - Census Data
39. Construction Establishments
   https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
   Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 23
   Data processing Method: Appendix A - Census Data
40. Utility System Construction Establishments
   https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
   Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 2371
   Data processing Method: Appendix A - Census Data

**DOMAIN - SOCIAL CAPITAL AND COHESION:**
41. Civic Organizations
   https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000

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Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 813410
Data processing Method: Appendix A - Census Data
42. Voter Participation
https://dataverse.harvard.edu/dataset.xhtml?persistentId=doi:10.7910/DVN/VOQCHQ
43. Social Advocacy Organizations
https://data.census.gov/cedsci/table?q=%20CB2000CBP&g=0100000US%240500000
Data Filter: ACS 5-Year Estimates; All counties; 2017 NAICS code 8133
Data processing Method: Appendix A - Census Data

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APPENDIX A - Data Collection Methods for Different Data Sources

1. **Census Data**
   (1) ACS
   - Build filters based on the filter description of each measure.
   - Download the CSV file and open it in Excel
   - Clean the FIPS number by inserting a new column and using the function “=RIGHT("select",5).” Save the last five digits of the GEO_ID
   - In a new spreadsheet page, copy and paste the new column (five digits of FIPS) to column A and the specific data column to column B. Use “Sort & Filter” > “Filter” if necessary.
   - Save the new spreadsheet separately in CSV format.

(2) County Business Patterns
   - Choose a state, and go to “Downloads” tab to download data in Excel format. Find the sheet which has the data column you are looking for and clean the rest of the data by deleting unnecessary sheets.
   - Code in R to select the specific column to create a CSV file where the FIPS values are in column A and the specific data values are in column B.
   - Do the same for other states to create a single CSV file with all counties' FIPS and specific values.

2. **NCES Data**
   - Go to the link: [https://nces.ed.gov/ccd/elsi/tableGenerator.aspx](https://nces.ed.gov/ccd/elsi/tableGenerator.aspx)
   - Build filters based on the filter description of each measure.
   - Add the FIPS number as a column for the dataset.
   - Clean up the format.

3. **County Health Rankings**
   - Go to the link: [https://www.countyhealthrankings.org/app/alabama/2022/overview](https://www.countyhealthrankings.org/app/alabama/2022/overview)
   - Select year
   - Select state
   - Scroll and download the full Excel file
   - Repeat for every state, and save all datasheets in one folder with only the data

4. **HRSA Data Warehouse**
   - Go to the link: [https://data.hrsa.gov/data/download](https://data.hrsa.gov/data/download)
   - Select “Area Health Resources Files” and select the most recent “20xx - 20xx County Data”
   - Download the “Technical documentation” and check for the “Hospital Beds” variable
   - Under source, select “AHA Survey Database” to find the data

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5. **NACo Data**
   - Go to the link: [https://ce.naco.org/?dset=County%20Expenditures&ind=Infrastructure%20Expenditures](https://ce.naco.org/?dset=County%20Expenditures&ind=Infrastructure%20Expenditures)
   - Click on any county and see detailed information about the state by clicking on “Compare”.
   - Save the web page as a pdf file and use Adobe tools to transform the pdf file into an excel file.
   - Combine data from all states and clean up the format.
   - Match the county names with FIPS numbers.

6. **PHAB Data**
   - Go to the link: [https://phaboard.org/accreditation-recognition/accreditation-activity/](https://phaboard.org/accreditation-recognition/accreditation-activity/)
   - Download the excel spreadsheet.
   - Match each city or area with its jurisdiction (e.g., state and county).
   - Calculate the number of health departments in each state.
   - Calculate the national mean \( m \) of the number of health departments.
   - Encoding counties in the state that has a high level (\( > m \)) of PHAB Accreditation as 1, otherwise 0.
   - If a county has a health department locally, then add one to the original value (e.g., 0 (state level) + 1 (county level) = 1).

7. **FEMA Data**
   - Download the CVS file.
   - Filter out records (e.g., Mitigation plan status) based on the expiration date (e.g., by 2023.12.01).
   - Match the county and the corresponding population cover by each mitigation plan.
   - Use the population of the county covered by plans divided by the whole population of the county.
   - Clean up the format.

8. **DOT Data**
   - Go to the link: [https://www.fhwa.dot.gov/bridge/nbi/no10/county22.cfm](https://www.fhwa.dot.gov/bridge/nbi/no10/county22.cfm)
   - Save the page as HTML.
   - Import HTML to excel file.
   - Get county name, bridge counts – poor, bridge counts – all for every county
     - Will have to download multiple HTML files – not all counties are displayed on one page of the website, continue downloading until all counties are accounted for
   - Consolidate desired information in one file, divide bridge count – poor / bridge count – all to get percentages.

For additional information, contact Tak Igusa at tigusa1@jhu.edu.

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