Justice40 Data Attribution Guide Training

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Updates (New/Altered Slides Teal Background have been altered)

- 1. The CEJST 1.0 Tool has been launched and the new criteria and information on the data sources has been added to the RAC Data Attribution Guide as well as this Powerpoint Slide Deck.
- 2. To reduce potential for confusion, the Department of Energy and Department of Education and its departments have been relocated to the Agency Breakdown.
- 3. Version History instructions revised for clarification
- 4. More clear instructions for how to provide feedback, suggest resources, and be given attribution for said feedback.
- 5. Data Attribution Spreadsheet Headers Updated to reflect that there are dataset provided by Organizations and Government Agencies and Category name changes
- 6. Removal of "RAC Energy Justice Map", no longer maintained or recommended for use
- 7. Changed Link colors to make them more visible
- 8. EPA EJScreen Supplemental Indices Added
- 9. Email for Feedback altered, however prior email will also be checked as well.
- 10. Slide Numbers and Headers for Table of Contents Updates
- 11. From this Point forward the Table of Contents will be Purple and no other slides will have that color, making it easy to locate



General Note

- Thank you for visiting this resource, we hope this tool proves to be useful to you when working with Justice40 Data and learning about the Justice40 Initiative.
- This resource is not developed by the United States Government or Affiliated Organizations mentioned in this resource as of this iteration of this tool or prior versions.
 - No compensation is being provided for the development of this resource by the United States Government or Affiliated Organizations.
- The Justice40 Initiative is constantly developing and at least one linked resource is in Beta at the time of the creation of this iteration of this tool.
- To provide feedback please email this email: <u>lbooherhbe@gmail.com</u>.
 - For specifics, please see the next slides.



How to Provide Feedback (Slide 1)

- Keep in mind this resource contains links to resources that are intended for use of many audiences and usage restrictions if applicable may limit the inclusion/detail of your feedback.
- Please see the Data Usage Recommendations for initial information on Data Access and Usage Rights and how to contact Dataset Owners if applicable.



How to Provide Feedback (Slide 2)

- When providing feedback if applicable please state if possible:
 - Your Name, Job Title, Organization, Etc. if Applicable
 - Please include whatever information you feel comfortable with including. See later slide on information on how you would like or not like to be given attribution relative to your feedback.
 - The slide number(s)
 - The link(s), bullet point(s), or media to which your are referring
 - The recommended correction and your source (multiple links or one if applicable)
 - If this is a print resource, please provide an easy means to locate said resource (more than one of the below)
 - ISBN Number
 - Title and Author
 - Edition
 - Agency
 - Government Document Number
 - Anything else that my be applicable
 - If this resource requires professional credentials with government agencies or other organizations to access and/or access to a location like a Federal Reading Room
 - If this resource requires a security clearance or similar permission per individual
 - This would be included in a means to access said resource if applicable with the conditions you must meet to gain access
 - If this resource requires compensation to access
 - This would be included in a means to access said resource if applicable with the conditions you must meet to gain access
 - Any other information that is not included in the above bullet point(s), but pertains to your feedback



How to Provide Feedback (Slide 3)

- If you would like to be mentioned in the correction if it is verified from authoritative sources (bolded text indicates what would be feedback specific).
- This will be included in its own slide and referenced specifically in an Updates Slide.
 - Following: "Thank you to: "
 - Your Name, Job Title, Organization, etc. for feedback on "Correction with slide number(s) and detail of revision(s)"
 - Those at Your Organization for feedback on "Correction with slide number(s) and detail of revision(s)"
 - Those who prefer to remain anonymous that provided feedback on "Correction with slide number(s) and detail of revision(s)"
 - "Thank you for those who provided feedback on "Correction with slide number(s) and detail of revision(s)"
 - If you prefer alternate attribution, within reason, please include that in your correspondence
 - Examples of excludable terms include:
 - Vulgar or Inappropriate Terms
 - Hurtful, Racist, or Derogatory Terms
 - Any Other Inappropriate or Unprofessional Attribution
- You will receive correspondence about your feedback, as well as follow-up inquiries if applicable.
- For other inquiries please feel free to reach out as well if not already stated in these slides.



What is <u>Justice40</u>?

On January 27, 2021, President Biden signed Executive Order 14008, which tasked a group of executive branch officials with developing recommendations for ensuring that 40% of the overall benefits of federal investments in climate-related programs flow to disadvantaged communities – the Justice40 Initiative (J40I). The J40I does not include specifically earmarked funds but is rather a "whole-of-government approach" to advancing towards environmental justice and economic inclusion.



Sec. 223. Justice40 Initiative. (a) Within 120 days of the date of this order, the Chair of the Council on Environmental Quality, the Director of the Office of Management and Budget, and the National Climate Advisor, in consultation with the Advisory Council, shall jointly publish recommendations on how certain Federal investments might be made toward a goal that 40 percent of the overall benefits flow to disadvantaged communities. The recommendations shall focus on investments in the areas of clean energy and energy efficiency; clean transit; affordable and sustainable housing; training and workforce development; the remediation and reduction of legacy pollution; and the development of critical clean water infrastructure. The recommendations shall reflect existing authorities the agencies may possess for achieving the 40-percent goal as well as recommendations on any legislation needed to achieve the 40-percent goal.



What is Justice40?

Initial Justice40 Initiative Presentation

 A precursor to this training in the linked presentation above which goes into more detail on the Justice40 Initiative and the RAC Justice40 Data Attribution Guide.

RAC Justice40 Data Attribution Guide

- This presentation focuses more specifically on the data contributing to Justice40 categories to allow further exploration into the Justice40 data.
- Additionally, there is further information on data available from contributing agencies.
- This resource is currently being updated to reflect current data.
- <u>9.14.2022 Prior Version of this Resource</u>
- <u>10.11.2022 Prior Version of this Resource</u>



Training Information

- WARNING: When clicking links they may open in the same window as this presentation in your browser. Right Clicking the link and selecting "Open in another Tab/Window" may avoid this problem
- This training was last reviewed on 1/11/2023. Prior Versions: 9/14/2022 and 10/11/2022. This presentation links to resources managed by federal agencies and external organizations. Prior to use of data, check usage rights and relative data documentation to ensure correct use and interpretation of data.
- This slide deck contains live links to resources and is intended as a comprehensive tool for review to accompany the RAC Justice40 Data Attribution Guide. There are additional resources linked to assist you.
- <u>9.8.2022 Justice40 Presentation</u>
- <u>9.14.2022 Justice 40 Data Attribution Guide Training</u>
- <u>10.11.2022 Prior Version of this Resource</u>



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Overview



What is GIS?

- Many of the datasets that factor into Justice40 categories are available through GIS tools.
- A geographic information system (GIS) is a system that creates, manages, analyzes, and maps data. <u>Source</u>
- GIS enables us to put What (data) and Where (location) together
- GIS is important for the Justice40 Initiative as it enables us to combine data to assess what areas are in a Justice40 category.



How can I tell if I am in a Justice40 category?

You can currently utilize the following tools (ordered by recommendation of use):

- 1. Climate and Economic Justice Screening Tool
 - a. This tool is based off of 2010 Census Data GEOID/FIPS Codes
- 2. DOE Energy Justice Dashboard
 - a. If completing a DOE Application, prioritize this map due to the GEOID/FIPS code pairing with the ACS 2015-2019 5-Year Estimates
- 3. DOE Energy Justice Dashboard Beta
- 4. Justice40 Census Tracts
 - a. Considered Deprecated, and not recommended for use



CEJST Map



What is the Climate and Economic Justice Screening Tool Justice 40 (CEJST) Map?

- The purpose of the tool is to **help Federal agencies identify disadvantaged communities** that are marginalized, underserved, and overburdened by pollution.
- Communities that are disadvantaged live in tracts that experience burdens.
- The current version of the tool provides **socioeconomic, environmental, and climate information** to inform decisions that may affect these communities.
- The tool identifies disadvantaged communities through **publicly-available**, **nationally-consistent datasets**.
- The current version of the tool is in a 1.0 version and will be updated based on feedback and research.
 - The previous Beta Version was covered in these trainings and this is the first time this resource has covered the CEJST 1.0 Tool.
 - The Category names are different in the Beta Tool.
- The tool utilizes the census tract boundaries from 2010. This was chosen because many of the data sources in the tool currently use the 2010 census boundaries.
- <u>Climate and Economic Justice Screening Tool Justice 40 Map</u>



Justice40 Tools

- Data Methodology from CEJST Map
- Previous Version CEJST Map Data Link
- <u>Climate and Economic Justice Screening Tool Justice 40 Map</u>
- CEJST Data Download Page
- Justice 40 Data Attribution Spreadsheet



CEJST Data Available for Download

- Updated Page with the Links Below: LINK
 - To see the Beta Data, select the "Previous Versions" to download the Beta Versions
 - The older Beta links are preserved in this slide under the Beta bulletpoint

• Version 1.0 (<u>download link</u>)

- Communities list data (.xlsx 35.6MB) OR (.csv 42MB)
- Shapefile (Codebook included with shapefile 356.8MB unzipped)
- Technical support document (.pdf 4.4MB)
- How to use the list of communities (.pdf 687.9kB)
- Beta
 - Communities List Data
 - XLSX
 - CSV
 - Shapefile
 - How to Use the List of Communities
 - Link: <u>How to Use the List of Communities</u>
 - Technical Support Document
 - Link: <u>PDF</u>



- Puerto Rico has data in the following categories
 - Energy
 - \circ Housing
 - Legacy pollution
 - Transportation
 - Workforce development



- Puerto Rico Data sources included are:
 - low income
 - projected flood risk
 - energy cost
 - lack of indoor plumbing
 - lead paint
 - housing cost
 - proximity to hazardous waste facilities
 - proximity to Superfund or National Priorities List (NPL) sites
 - proximity to Risk Management Plan (RMP) facilities
 - diesel particulate matter exposure
 - traffic proximity and volume
 - underground storage tanks and releases
 - wastewater discharge
 - low median income
 - poverty
 - unemployment
 - high school education
- Linguistic isolation was removed for Puerto Rico based on feedback received during the beta period.



- American Samoa, Guam, the Northern Mariana Islands, and the U.S. Virgin Islands
 - Only has data for the Workforce Development Category
- The CEJST tool uses the following data:
 - Unemployment
 - Poverty
 - Low median income
 - High school education



- Land within the boundaries of Federally Recognized Tribes are designated as disadvantaged on the map.
- Alaska Native Villages are included as point locations that are smaller than a census tract.
- The boundaries of census tracts and the lands of Federally Recognized Tribes are different.
- For more information see the bottom of this page



New Data Categories to CEJST 1.0

Projected Flood Risk

- A climate-adjusted model that projects flood risk for properties in the future.
- The dataset calculates how many properties are at risk of floods occurring in the next thirty years from:
 - Tides
 - Rain
 - Riverine
 - Storm surges
 - \circ $\,$ $\,$ Or a 26% risk total over the 30-year time horizon $\,$
- Risk is defined as an annualized 1% chance.
- The tool calculates tract-level risk as the share of properties meeting the risk threshold.
 - The risk does not consider property value.
- Used in the Climate change category
 - Data Source: First Street Foundation
 - Source: <u>Climate Risk Data Access from 2022</u>
- Available for: All U.S. states, the District of Columbia, and Puerto Rico



Projected Wildfire Risk

- A 30-meter resolution model projecting the wildfire exposure for any specific location in the contiguous U.S., today and with future climate change.
- Risk of wildfire is calculated from inputs associated with:
 - Fire fuels
 - Weather
 - Human influence
 - Fire movement
- The risk does not consider property value.
- Used in: Climate change category
 - Responsible Party: First Street Foundation
 - Source: <u>Climate Risk Data Access from 2022</u>
- Available for: All contiguous U.S. states and the District of Columbia



Historic Underinvestment

- Census tracts that experienced historic underinvestment based on redlining maps created by the federal government's Home Owners' Loan Corporation (HOLC) between 1935 and 1940.
- The tool uses the National Community Reinvestment Coalition's methodology for converting boundaries in the HOLC maps to census tracts.
 - Census tracts meet the threshold when they have a score of 3.25 or more out of 4.
- Note: The historic underinvestment burden is not available for tracts that were not included in the original HOLC maps because there is no underlying data.
- Used in: Housing category
 - Responsible Party: National Community Reinvestment Coalition (NCRC)
 - Source: <u>Dataset</u> of formerly redlined areas using digitized maps from the Home Owners Loan Corporation (HOLC), using 2010 census boundaries
- Available for: Metro areas of U.S. that were graded by the Home Owners' Loan Corporation



Lack of green space

- Share of land with developed surfaces covered with artificial materials like:
 - Concrete
 - Pavement
 - Excluding crop land used for agricultural purposes
- Places that lack green space are also known as nature-deprived.
- Used in: Housing category
 - Responsible Party: <u>Data</u> from Multi-Resolution Land Characteristics (MRLC) consortium; data analysis provided by The Trust for Public Lands and American Forests
 - Source: Percent Developed Imperviousness (CONUS) from 2019
- Available for: All contiguous U.S. states and the District of Columbia



Lack of Indoor Plumbing

- Housing without indoor kitchen facilities or complete plumbing facilities.
- Used in: Housing category
 - Responsible Party: Department of Housing and Urban Development (HUD)
 - Source: <u>Comprehensive Housing Affordability Strategy dataset from 2014-2018</u>
- Available for: All U.S. states, the District of Columbia, and Puerto Rico



Abandoned Mine Land

- Presence of an abandoned mine left by legacy coal mining operations.
- Used in: Legacy pollution category
 - Responsible Party: Department of the Interior (DOI)
 - Source: <u>Abandoned Mine Land Inventory System (e-AMLIS) from 2017</u>
- Public Access Link
- Authorized Personnel Access Link
- Note: Please read and understand the terms of use for this data as it comes with conditions and includes the following disclaimer at the time of this document:
 - All information, including personal information, placed or sent over this system may be monitored, and users of this system are reminded that such monitoring does occur. Therefore, there should be no expectation of privacy with respect to use of this system.
- Available for: All U.S. states and the District of Columbia



Formerly Used Defense Sites

- Properties that were owned, leased, or possessed by the United States, under the jurisdiction of the Secretary of Defense prior to October 1986.
- Used in: Legacy pollution category
 - Responsible Party: <u>U.S. Army Corps of Engineers</u>
 - Source: <u>Formerly Used Defense Sites (FUDS) from 2019</u>
- Note: You need to request an account in accordance with this documentation
- Available for: All U.S. states and the District of Columbia



Transportation Barriers

- Average relative cost and time spent on transportation relative to all other tracts.
 - Note: this burden only applies for census tracts with populations greater than 20 people.
- Used in: Transportation category
 - Responsible Party: Department of Transportation (DOT)
 - Source: <u>Transportation access disadvantage</u> from 2022
- Available for: All U.S. states and the District of Columbia



Underground Storage Tanks and Releases

- Weighted formula of the density of leaking underground storage tanks and the number of all active underground storage tanks within 1,500 feet of the census tract boundaries.
- Used in: Water and wastewater category
 - Responsible Party: Environmental Protection Agency (EPA)
 - Source: <u>Calculated from EPA's UST Finder from 2021 as compiled by EPA's EJScreen</u>
- UST Finder Info
- Available for: All U.S. states, the District of Columbia, and Puerto Rico



Tribes

- The Land Area Representation (LAR) dataset depicts American Indian land areas for Federally Recognized Tribes.
 - Note: The LAR dataset depicts the exterior extent of a Federal Indian land area. Not all Federally Recognized Tribes have a designated land area; therefore, they may not have an associated land area represented in the land area dataset.
- Used in: Displaying land within the boundaries of Federally Recognized Tribes and point locations of Alaska Native Villages on the map
 - Responsible Party: Bureau of Indian Affairs (BIA)
 - Source: Land Area Representation (LAR) dataset from 2018
- Available for: Federally Recognized Tribes, including Alaska Native villages
- Note in the Data Attribution Guide Spreadsheet, this is denoted across the board as a "Yes: Federally Recognized Tribes" value across the board as Federally Recognized Tribes are by default considered disadvantaged.



RAC Justice40 Data Attribution Guide

What is the RAC Justice40 Data Attribution Guide?

- The RAC Justice40 Data Attribution Guide is a tool that breaks down the composition of the Justice40 categories.
- This allows people, organizations, and anyone interested in the initiative to understand the factors determining census tracts that are disadvantaged.
- You are able to make copies of this Google Sheet, but if you elect to do so they will not continue to be updated if applicable.
- If you have feedback, please see the "How to Provide Feedback" Slides



RAC Justice40 Data Attribution Guide

• The Guide has five tabs:

- Data Key
 - Extra Links
 - Description of columns and their content
- Agencies by Geography
 - Breakdown by Geography and Agency
 - Composition of Categories in Justice40 Initiative
- Agencies by Category
 - Breakdown by Agency
 - Composition of Categories in Justice40 Initiative
- Full Data Summary
 - The complete list of datasets that factor into Justice40 Categories with:
 - Geographies included
 - Data URLs
 - Individual Attributes that compose the categories
- Department of Energy Dashboard Beta 20220922
 - Archived Data with Human Friendly Headers for the DOE Dashboard Data
 - <u>This tool</u> recommended for use instead for more current data



Data Used to Determine Eligibility for Justice40 Categories

• See Breakdown by Agency Tab in this Link

Data Breakdown by Geography and Agency/Organization

• See Breakdown by Geography Tab in this Link



DOE Energy Justice Dashboard (BETA)

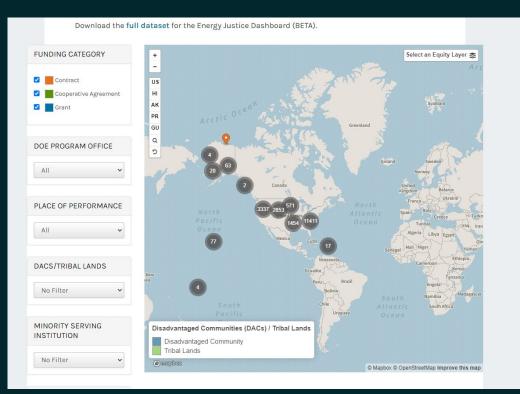


Energy Justice Dashboard Beta

- The Energy Justice Dashboard (BETA) is a pilot data visualization tool that displays DOE-specific investments in communities across the country
- The Dashboard displays
 - DOE cost data
 - Grants
 - Cooperative agreements
 - Contracts
- Data from more than twenty-five DOE program offices, for the fiscal years 2019 to present.



Energy Justice Dashboard





Energy Justice Dashboard

- The Energy Justice Dashboard (BETA) uses:
 - Environmental indicators from the U.S. Environmental Protection Agency's iconic EJSCREEN tool (Version 1.0)
 - Energy burden using data from DOE's Low-Income Energy Affordability Data (LEAD) Tool
 - US Department of Education, 2020 Eligibility Matrix. Retrieved May 18, 2021
 - US Census Tract Boundaries (2010)
 - Provisional COVID-19 Death Counts in the United States by County Retrieved September 14th, 2022 (<u>LINK</u>)
- Link to the Tool: LINK
- The Data is available directly for download at: LINK
 - WARNING: The download link on this page is a direct download link and will directly download the file onto your device



Energy Justice Dashboard Linked Resources

- WARNING: Some of these are direct download links, it will download directly to your computer if you click them (indicated with *)
- DOE Dashboard FAQ PDF: LINK
- DOE BETA Features PDF: LINK
- Scroll to bottom of this page: LINK
 - Also Available:
 - Tribal lands Shapefile*
 - US Territories and DACs Shapfile*
 - DAC stands for Disadvantaged Community
 - DAC Data for Census Tracts and Territories*



Energy Justice Dashboard DAC Definition

- The DOE working definition for DACs includes data for thirty-six (36) indicators collected at the census tract level that each represent a distinct dimension of disadvantage.
- These indicators can be grouped across the following categories
 - Fossil Dependence (2)
 - Energy Burden (5)
 - Environmental and Climate Hazards (10)
 - Vulnerability (socioeconomic, housing burden, transportation burdens, etc.) (19)
- Additional information about the DOE DACs definition can be found in the Energy Justice Dashboard (BETA) Resource Area and on the Justice40 Initiative page located at <u>LINK</u>.



Energy Justice Dashboard MSI Definition

- A minority serving institution (MSI) is an educational entity recognized by:
 - Office of Civil Rights (OCR)
 - U.S. Department of Education
 - OCR's Department of Education U.S. accredited postsecondary minorities institution list
- The list used for the Energy Justice Dashboard (BETA) is based on 2020 data from the U.S. Department of Education.
 - This data includes institutions that qualify for MSI funding and those receiving MSI funding.

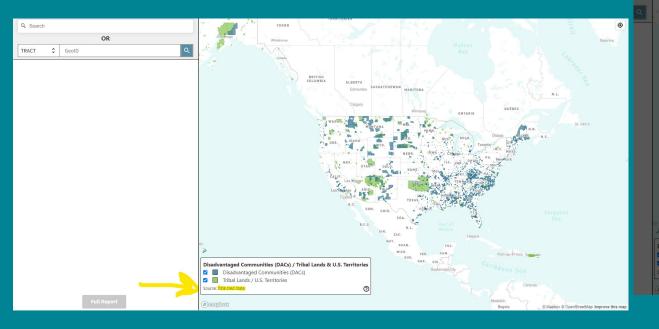


DOE Energy Justice Dashboard



DOE Dashboard Automatic Download Warning

<u>The highlighted links when clicked automatically download data, pdf, or</u>
 <u>shapefiles to your computer</u>



Energy Justice Mapping Tool -Disadvantaged Communities Reporter

Download: Data Indicator Descriptions Documentation Shapefile

The tool shows census tracts categorized as DACs in blue and federally recognized tribal lands and U.S. territories in green. The left panel enables a location search by either common geographies (zip, city county), tract number (GEOID), tribal name, or territory name. The left display shows the top 10 burden indicators for the selected census tract and the report shows values for all 36 burden indicators for the selected census tract and ther export shows information for federally recognized tribal lands and U.S. territories is forthcoming.

Additional Resources

- The Climate and Economic Justice Screening Tool (CEJST), a new tool by the White House Council on Environmental Quality (CEQ), aims to help Federal agencies identify DACs as part of the Justice40 Initiative.
- · More information about the Justice40 initiative

Contact

Office of Economic Impact & Diversity U.S. Department of Energy 1000 Independence Ave SW Washington, D.C. 20585 (202) 586-8383



(X)

DOE Dashboard Automatic Download Warning

- Clicking on DOE DAC Data downloads an xlsx file
- Clicking on Data downloads an xlsx file
- Clicking on Indicator Descriptions downloads a J40 DACs Data Descriptions, version 2022c PDF
- Clicking on Documentation downloads a J40 DACs Data Documentation Version 2022c PDF
- Clicking on Shapefiles downloads a ZIP file







DOE Dashboard

- This tool is intended to allow users to explore and produce reports on census tracts that the U.S. Department of Energy (DOE) has categorized as disadvantaged communities, or DACs, pursuant to <u>Executive Order (EO)</u> <u>14008 - Tackling the Climate Crisis at Home and Abroad</u>.
- The Office of Management and Budget (OMB)'s Interim Guidance defines a community as either:
 - A group of individuals living in geographic proximity (such as a census tract)
 - A geographically dispersed set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions.



Brief Description of DACs Methodology

- DOE's working definition of disadvantage is based on cumulative burden.
- There are thirty-six (36) burden indicators that reflect:
 - fossil dependence
 - energy burden
 - environmental and climate hazards
 - socio-economic vulnerabilities
- Further information on the indicators and data sources and can be found <u>here</u>.
- The characterization of DACs was created using data at the census tract level. There are 73,056 census tracts in the U.S., excluding U.S. territories.



Brief Description of DACs Methodology

- This is from the Energy Justice Mapping Tool Disadvantaged Communities Reporter Introductory <u>Screen</u>
- To identify the census tracts that could be categorized as a DAC, we processed data in four main steps:
 - For each census tract, we calculated the percentile values for each of the 36 burden indicators.
 - We summed the percentiles across the indicators to create a score for each tract. Each indicator received equal weight. The final scores for each census tract could range from 0 to 36, where 36 would represent the greatest disadvantage.
 - Based on the score, we selected the top 20 percent of census tracts in each state. This ensured that every state was represented.
 - To ensure wealthier locations were not inadvertently included, DAC eligibility was further restricted based on income. A census tract selected in step 3 was categorized as a DAC if at least 30% of households:
 - are at or below 200% of Federal Poverty Level and/or
 - are considered low-income households as defined by the Department of Housing and Urban Development (HUD)
- In sum: To be considered a DAC, a census tract must rank in the 80th percentile of the cumulative sum of the 36 burden indicators and have at least 30% of households classified as low-income.
- Additionally, federally recognized tribal lands and U.S. territories, in their entirety, are categorized as DACs in accordance with OMB's Interim Guidance "common conditions" definition of community.



DOE Visual Navigation

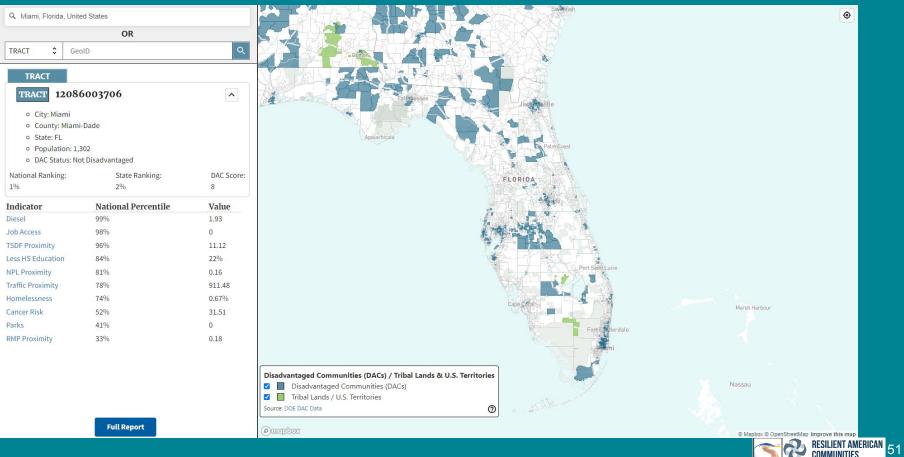
- DACs in blue
- Federally recognized tribal lands and U.S. territories in green
- The left panel
 - location search by either common geographies (zip, city county)
 - tract number (GEOID)
 - tribal name
 - territory name

• The Tract icon with arrows is a drop-down menu which can be expanded to give you:

- Tract
- Tribe
- Territory
- The left display shows:
 - top 10 burden indicators for the selected census tract
 - report shows values for all 36 burden indicators for the selected census tract
 - Additional information for federally recognized tribal lands and U.S. territories is forthcoming.



DOE Visual Navigation



DOE Dashboard Data Documentation

- This refers to J40 DACs Data Documentation Version 2022c Released: July 2022 By U.S. Department of Energy Office of Economic Impact and Diversity
 - <u>To retrieve this click on the Documentation Link in the DOE Dashboard</u>
- Refer to this documentation for information on the following data sources
- Data Sources Descriptions (Underlining indicates if there is further information in this resource about the data)
 - American Community Survey (ACS) 5-year estimates, 2015-2019
 - Longitudinal Employer-Household Dynamics (LEHD) Survey
 - EPA Environmental Justice Screening Tool (EJScreen)
 - Census Tract City Place Relationship Table
 - Low-Income Energy Affordability Data (LEAD) Tool
 - Current Employment Statistics (CES)
 - Electric Emergency Incident and Disturbance Report
 - Food Access Research Atlas Data
 - Housing and Transportation Affordability Index (H+T® Index)
 - Indicators of Broadband Need Map
 - USA Parks geodatabase
 - Continuum of Care GIS Tools, 2019
 - LMISD All Block Groups, Based on 2011-2015 ACS
 - FEMA National Risk Index (NRI), 2020



DOE Dashboard Data Documentation

- This refers to J40 DACs Data Documentation Version 2022c Released: July 2022 By U.S. Department of Energy Office of Economic Impact and Diversity
 - <u>To retrieve this click on the Documentation Link in the DOE Dashboard</u>
- This documentation further defines the following:
 - Short and Long Variable Names
 - Data Publisher
 - Contact Name and Email
 - Public Access Level
 - Homepage (URL)
 - Last Update
 - Update Frequency



DOE Dashboard Data Indicators

- This refers to J40 DACs Data Descriptions, version 2022c
 - <u>To retrieve this click on the Indicator Descriptions Link in the DOE Dashboard</u>
- This documentation breaks down the DOE Categories by the following groups:
 - Energy Burden (5)
 - Environmental and Climate Hazards (10)
 - Socio-economic Vulnerabilities (19)
 - Fossil Dependence (2)
 - Informational and Computed Values
 - Geographic
- This documentation also provides:
 - Description
 - Definition
 - Variable Name (Short)
 - Source
 - Agency
 - Dataset
 - Years of Data Collection



DOE Dashboard Group Breakdown

- This refers to J40 DACs Data Descriptions, version 2022c
 - <u>To retrieve this click on the Indicator Descriptions Link in the DOE Dashboard</u>
- Energy Burden (5)
 - Energy Burden
 - Non-grid connected heating fuel
 - Outage Duration
 - Outage Events
 - Transportation Costs

• Environmental and Climate Hazards (10)

- Cancer Risk
- Climate Hazards Loss of Life Estimates
- Diesel
- Homes Built Before 1960
- NPL Proximity
- PM25
- RMP Proximity
- Traffic Proximity
- TSDF Proximity
- Water Discharge



DOE Dashboard Group Breakdown

• This refers to J40 DACs Data Descriptions, version 2022c

- To retrieve this click on the Indicator Descriptions Link in the DOE Dashboard
- Socio-economic Vulnerabilities (19)
 - >30 min commute
 - Disabled Population
 - Food Desert
 - Homelessness
 - Housing Costs
 - Incomplete Plumbing
 - Internet Access
 - Job Access
 - Less HS Education
 - Linguistic Isolation
 - Note: The CEJST Tool Removed this for Puerto Rico due to feedback of their Beta Tool
 - Low Income Population
 - Mobile Home
 - No Vehicle
 - Parks
 - Population 65+
 - Renters
 - Single Parent
 - Unemployed
 - Uninsured



DOE Dashboard Group Breakdown

- This refers to J40 DACs Data Descriptions, version 2022c
 - To retrieve this click on the Indicator Descriptions Link in the DOE Dashboard
- Fossil Dependence (2)
 - Coal Employment
 - Fossil Energy Employment
- Informational and Computed Values
 - DAC Score
 - DAC Status
 - Low Income Population
 - National Ranking
 - Population
 - State Ranking
- Geographic
 - CBSA Name
 - Census Tract FIPS Code
 - City
 - Core-Based Statistical Area
 - County FIPS Code
 - County Name
 - State Abbreviation Code
 - State FIPS Code
 - State Full Name



Contact Information on the DOE Dashboard Tool

Office of Economic Impact & Diversity U.S. Department of Energy 1000 Independence Ave SW Washington, D.C. 20585 (202) 586-8383 energyjustice@hq.doe.gov www.energy.gov/justice40

Additional DOE Justice40 Information



Grants Resources



Grants Resources

- Grants.gov Youtube Channel: LINK
- Grants.gov Community Blog: LINK
- Grants Learning Center: LINK
- Grants.gov XML Extract File Webpage: LINK
- EERE Funding Opportunities Page (Links through to other resources): LINK
- EERE Funding Opportunities Exchange: LINK
- Federal Service Desk Knowledge Base Videos: Link
- Federal Service Desk Knowledge Base: LINK
- Sam.gov: LINK



Data Usage Tips



Data Anonymization

- Data from government agencies may be limited or only available for a larger geographic area in some areas to insure anonymity of those surveyed.
- This will most likely be disclosed in the data methodology/practices/documentation.



Data Back-ups

- Backing up your data in several forms is a good idea and can be done several ways:
 - Save periodically to avoid loss of data if working in a local disk only
 - Can be saved to a cloud or 1+ external hard drives
 - Back-up to a cloud server or several (iCloud, Google Drive, Dropbox etc.)
 - In Google drive make a copy of the document under the File menu
 - Alternatively you can download the file and name it using a File Name Suggestion Naming Convention down below (recommended for organization)
- When working with a cloud data storage method
 - Create a folder which contains all other subfolders
 - Ex. Master Folder contains all other folders
 - This can enable the simultaneous download of all data from the cloud without the need to download files separately
- Maintain several back-ups (this can potentially be automated)
 - Date your back-ups and save many iterations
 - Total loss of data is devastating to avoid this back up data in one or more of the following methods on a schedule which can be:
 - Monthly
 - Weekly
 - Bi-weekly
 - Daily at a set time
- File Name Suggestions
 - If possible standardize the name of your backups
 - Xx.xx.xxxx Computer Backup
 - Google Drive Backup xx.xx.xxxx
 - Xx.xxxx Data Back-up
 - Xx.xx.xxxx Spreadsheet name backup
 - Project Name.Version_X



Google Drive

- 1. Google drive saves your changes iteratively as you go
- 2. To access this open the document/project in question
- 3. Click File
- 4. Locate the version history option
- 5. Click on See version history
 - ALTERNATIVE: Control + Alt + Shift + H
- 6. Locate the desired previous version
- 7. Restore the version*

*You can name a version in this menu and not restore it to come back to it later

*You can also make a copy of the previous version directly from this menu



Creative Commons Licenses

- CC Licenses
 - Creative Commons Licenses
 - Disclaimer: There may be other licenses or usage restrictions conveyed in other means with a dataset
- The dataset may have requirements such as:
 - A specific crediting phrase which must be included
 - Limited use (not commercial)
- When in doubt:
 - Keep track of every data source you might use
 - URLs
 - Names
 - Parameters
 - Anything else that may be useful
 - Include this in grant proposals
 - Credit the data source in one or all of the above:
 - Bibliography
 - Report of Findings
 - URL
 - Other means (potentially included in the literature accompanying the data)



Data Visualization

- Data visualization is a larger discipline/skill with many specializations, programs, and applications.
- General Tips:
 - When graphing data try to make it easy to understand with clear labels.
 - Use x-axis and y-axis scales that make sense for your data
 - When working with maps be careful to make your materials legible and easy to understand.
 - Include a legend and/or scale if possible when mapping information.
 - When scripting your data analysis or visualization, every time you run it check that it is working correctly.



Data Types

- There are many data types and file formats.
- Some formats are not compatible with all softwares.
- When working with your data be aware of the software to which you have access to and the file formats that are compatible with them.
- File size limitations may also be a problem.
- The documentation for the software you are using (Excel, Google Sheets, Canva, ArcGIS, etc.) will most likely contain this information.
- File Format Guide



Data Access

- Datasets may require you to contact the owner of the dataset.
- This could be, but is not limited to, commercial or government datasets.
- This will vary based on the dataset, <u>if it has the option "Contact the owner" of the dataset</u> I recommend the following:
 - State your affiliation (NGO, corporation, working individually, student, etc.)
 - State why you are interested in the dataset (school project, community mapping, use in a federally funded grant)
 - Commercial use may be important, <u>mention if you will potentially earn income</u> from the use of this data
 - The scope of the dataset you need
 - ex. The vaccine providers in the following zip codes followed by a list
 - ex. The entire state of X by county for number of people who own hamsters
 - Preferred File Format
 - State size limitations if applicable
 - State file formats you cannot receive and formats you can receive
 - Request if possible a follow-up email within a reasonable time to receive confirmation:
 - Thank you, but no this is unavailable
 - Here is the data you requested
 - A timeframe in which the data can be given to you
 - A follow-up with some possible restrictions for the data you will receive
 - ex. No personal information, No addresses, etc.
 - **Respond appropriately**, promptly, and in a professional manner



Individual datasets determining the Justice40 Categories



Justice40 Datasets

- The datasets that are in the Justice40 categories are a combination of GIS interactive tools and downloadable data.
- Some of these datasets are not available in all geographies.
- List of datasets specifically contributing to the Justice 40 Categories
- <u>RAC Justice40 Data Attribution Guide</u>
 - Go to Full Data Summary Tab
- For the DOE Individual Dataset Breakdown refer to the DOE Dashboard Slides and the instructions on how to download the following files:
 - J40 DACs Data Descriptions, version 2022c PDF
 - J40 DACs Data Documentation Version 2022c PDF



Breakdown of Datasets by Agency or Organization



Agencies and Organizations contributing data to Justice40 Eligibility

- Environmental Protection Agency
- Census Bureau
- Department of Housing and Urban Development
- Department of Transportation
- Office of Energy Efficiency and Renewable Energy
- Office of Air and Radiation (Environmental Protection Agency)
- Federal Emergency Management Agency
- Centers for Disease Control
- First Street Foundation
- Multi-Resolution Land Characteristics (MRLC)
- Trust for Public Lands
- American Forests
- Department of the Interior
- U.S. Army Corps of Engineers
- Bureau of Indian Affairs



U.S. Department of Education



US Department of Education Eligibility Matrix

- ED's mission is to promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.
- ED was created in 1980 by combining offices from several federal agencies. ED's 4,400 employees and \$68 billion budget are dedicated to:
 - Establishing policies on federal financial aid for education, and distributing as well as monitoring those funds.
 - Collecting data on America's schools and disseminating research.
 - Focusing national attention on key educational issues.
 - Prohibiting discrimination and ensuring equal access to education.
- More about the US Department of Education
- <u>Department of Education Research and Statistics</u>
- <u>Department of Education Open Data Platform</u>
- Information about 2022 Department of Education Eligibility Matrix: <u>LINK</u>
 - Eligibility Matrix Available for download
 - 2007 to present with Excel and PDF Format
 - 2005-2006 with MS Word and PDF Format
- Data comes from the Office of Postsecondary Education: <u>LINK</u>



Department of Energy



Office of Environmental Management (EM)

- The U.S. Department of Energy's (DOE) Office of Environmental Management (EM) mission is to:
 - Address the nation's Cold War environmental legacy from:
 - five decades of nuclear weapons production
 - government-sponsored nuclear energy research.
- This legacy includes:
 - dangerous radioactive sites with large amounts of radioactive wastes
 - spent nuclear fuel (SNF)
 - excess plutonium and uranium
 - thousands of contaminated facilities
 - contaminated soil and groundwater
- EM has the responsibility of cleaning up 107 sites across the country with progress in nearly every area of nuclear waste cleanup and completed cleanup at 91 of these sites.
- More information: <u>LINK</u>



Advanced Research Projects Agency - Energy (ARPA-E)

- The Advanced Research Projects Agency-Energy (ARPA-E) advances high-potential, high-impact energy technologies that are too early for private-sector investment.
- ARPA-E awardees are developing entirely new ways to generate, store, and use energy.
- More Information: LINK



National Nuclear Security Administration (NNSA)

- NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science.
- NNSA
 - maintains and enhances the safety, security, and effectiveness of the U.S. nuclear weapons stockpile
 - works to reduce the global danger from weapons of mass destruction
 - provides the U.S. Navy with safe and militarily effective nuclear propulsion
 - responds to nuclear and radiological emergencies in the United States and abroad
- More Information: LINP



Department of Energy Office of International Affairs

- The Office of International Affairs coordinates Department efforts to ensure a unified voice in our international energy policy.
- We work closely with:
 - Federal departments and agencies
 - Private sector
 - Other nations
 - International organizations
- More Information: LINK



Office of Artificial Intelligence & Technology (AITO)

• Mission

- Coordinate responsible and trustworthy artificial intelligence (AI) governance and capabilities.
- Advocate for program offices
- Provide advice on trustworthy AI/ML strategies
- Expand public, private and international partnerships, policy and innovations
- More Information: LINK



First Street Foundation



First Street Foundation

- First Street Foundation first publicly declared the intent to quantify America's flood risks in April of 2019. (<u>Source</u>)
- First Street Foundation is registered in the State of New York as a 501(c)(3) organization.
- First Street Foundation states that:
 - A changing climate is impacting the risks facing American properties, communities, and businesses as perils like flood, fire, heat, and other perils t become more common, and more severe.
 - Our work addresses that gap to ensure every American homeowner, renter, business, and community has access to the best climate risk data available through RiskFactor.com, and Risk Factor Pro, providing in-depth, climate adjusted, property specific risk assessments for homes across the United States, including Alaska, Hawaii and Puerto Rico.
 - Our data and models also help inform federal government agencies like Fannie Mae, the Federal Housing Finance Agency, the U.S. Departments of Treasury, and Commerce, the Federal Reserve Banks, and others in their assessment of climate risk to the U.S. economy.



First Street Foundation

- First Street Foundation offers <u>Paid</u> and <u>Free</u> Access to their data, as well as <u>Data Documentation</u>
- Their Data Models include:
 - Extreme Heat Model
 - Wildfire Model
 - Flood Model
 - Coastal Tide and Surge Flood Model
- They also have several peer reviewed papers related to their work.
- For more information please visit their <u>website</u>, and from this point forward this resource will focus on the data specific to the Justice40 initiative.
- Note: This website may move to a new page in the same tab if you click on it. This means if you close said tab you may need to re-open the website through the search bar or Google again.



First Street Foundation Data

- The First Street Foundation is licensed under the Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) license.
 - If you intend to work with this data, it is recommended that you read in full the license and make sure you are complying with the licensing use.
- This license allows you to:
 - Share copy and redistribute the material in any medium or format
 - Adapt remix, transform, and build upon the material
 - The licensor cannot revoke these freedoms as long as you follow the license terms
 - This is not a substitute for reading the license in full
- The following datasets are accessible on the AWS Platform (those underlined are used in the Justice40 framework):
 - Flood Factor ® First Street US Climate Flood Risk Data Aggregate
 - Fire Factor ® First Street US Climate Wildfire Risk Data Aggregate
 - <u>Heat Factor ™ First Street US Climate Heat Risk Data Aggregate</u>
 - First Street US Climate Flood Risk Data Aggregate ADX
- Additional Resources
 - <u>FAQs</u>
 - Models and Methodology



• According to the <u>NCRC About Page</u>

- The National Community Reinvestment Coalition and its grassroots member organizations:
 - create opportunities for people to build wealth
 - work with community leaders, policymakers and financial institutions
 - With efforts tochampion fairness and end discrimination in lending, housing and business
- NCRC was formed in 1990 by national, regional and local organizations to increase the flow of private capital into traditionally underserved communities.
- NCRC has grown into an association of more than 600 community-based organizations that promote access to basic banking services, affordable housing, entrepreneurship, job creation and vibrant communities for America's working families.
- Their members include:
 - community reinvestment organizations
 - community development corporations
 - local and state government agencies
 - faith-based institutions
 - community organizing and civil rights groups
 - minority and women-owned business associations
 - local and social service providers from across the nation



- According to the <u>NCRC About Page</u>
- NCRC
 - provides agenda-setting research, training, insight and advocacy on behalf of members
 - renovate and build affordable homes for low- and moderate-income families
 - provide counseling to home buyers and owners and business-building expertise to entrepreneurs
 - train and support housing counselors nationwide
 - we test, monitor and challenge discrimination in financial services and housing
 - we convene and facilitate dialog between financial institutions and community networks to increase lending, investments and philanthropy in neighborhoods that need it.
- NCRC represents its members before Congress, federal regulatory agencies and the press.
- NCRC routinely testifies before Congress, and meets with the leadership of banking and financial regulatory agencies.
- NCRC frequently provides expert commentary for national, regional and local media, and our research and policy papers are routinely cited by journalists, economists and scholars focused on banking, housing, urban renewal, rural development and civil rights.



- NCRC has a provided analysis for the dataset of formerly redlined areas using digitized maps from the Home Owners Loan Corporation (HOLC), using 2010 census boundaries.
- The accredited Funding Source is: Greater Milwaukee Foundation (Shaw Scientist Award)
- Scope of Project
 - Subject Terms: Structural racism; redlining
 - Geographic Coverage: United States Metro Areas
- Methodology
 - Geographic Unit: census tract
- The following publications cite the data in this project.
 - Meier, Helen C.S., Bruce C. Mitchell, Jason Richardson, Emily E. Lynch, and Jad Edlebi. "The Lasting Impact of Historic 'Redlining' on Neighborhood Health: Higher Prevalence of COVID-19 Risk Factors." Washington, D.C.: National Community Reinvestment Coalition, September 10, 2020. <u>https://ncrc.org/holc-health/</u>.
 - Meier, Helen, and Bruce Mitchell. "Tracing the Legacy of Redlining: A New Method for Tracking the Origins of Housing Segregation."
 Washington, D.C.: National Community Reinvestment Coalition, February 1, 2022. https://ncrc.org/redlining-score/.
- The following publications relate in an unspecified way to the data in this project.
 - Lynch, Emily E., Lorraine Halinka Malcoe, Sarah E. Laurent, Jason Richardson, Bruce C. Mitchell, and Helen C.S. Meier. "The Legacy of Structural Racism: Associations between Historic Redlining, Current Mortgage Lending, and Health." SSM Population Health 14 (June 2021): 100793. https://doi.org/10.1016/j.ssmph.2021.100793.



• The <u>Dataset</u> has the following summary

The Home Owners' Loan Corporation (HOLC) was a U.S. federal agency that graded mortgage investment risk of neighborhoods across the U.S. between 1935 and 1940. HOLC residential security maps standardized neighborhood risk appraisal methods that included race and ethnicity, pioneering the institutional logic of residential "redlining." The Mapping Inequality Project digitized the HOLC mortgage security risk maps from the 1930s. We overlaid the HOLC maps with 2010 and 2020 census tracts for 142 cities across the U.S. using ArcGIS and determined the proportion of HOLC residential security grades contained within the boundaries. We assigned a numerical value to each HOLC risk category as follows: 1 for "A" grade, 2 for "B" grade, 3 for "C" grade, and 4 for "D" grade. We calculated a historic redlining score from the summed proportion of HOLC residential security grades multiplied by a weighting factor based on area within each census tract. A higher score means greater redlining of the census tract. Continuous historic redlining score, assessing the degree of "redlining," as well as 4 equal interval divisions of redlining, can be linked to existing data sources by census tract identifier allowing for one form of structural racism in the housing market to be assessed with a variety of outcomes. The 2010 files are set to census 2010 tract boundaries. The 2020 files use the new census 2020 tract boundaries, reflecting the increase in the number of tracts from 12,888 in 2010, to 13,488 in 2020. Use the 2010 HRS with decennial census 2010 or ACS 2010-2019 data. As of publication (10/15/2020) decennial census 2020 data for the P1 (population) and H1 (housing) files are available from census.



- The Dataset is available for download at the following Link
- At this time the last modified date is 10/15/2021
- The data has the following formats:
 - HRS2010-Shapefiles
 - .shp
 - .dbf
 - ∎ .prj
 - .sbn
 - .sbx
 - .shp
 - .shp.xml
 - .shx
 - HRS2020-Shapefiles
 - .shp
 - .dbf
 - ∎ .prj
 - ∎ .sbn
 - .sbx
 - .shp
 - .shp.xml
 - .shx
 - HRS2010B.sav
 - HRS2020B.sav
 - Historic Redlining Score 2010B.xlsx 453 KB Excel File
 - Historic Redlining Score 2020B.xlsx 453 KB Excel File



Lack of Green Space (MRLC, Trust for Public Lands, American Forests)



Multi-Resolution Land Characteristics (MRLC) consortium



Multi-Resolution Land Characteristics (MRLC) consortium

- The Multi-Resolution Land Characteristics (MRLC) consortium is a group of federal agencies who coordinate and generate consistent and relevant land cover information at the national scale for a wide variety of environmental, land management, and modeling applications.
- The creation of this consortium has resulted in the mapping of the lower 48 United States, Hawaii, Alaska and Puerto Rico into a comprehensive land cover product termed, the National Land Cover Database (NLCD), from decadal Landsat satellite imagery and other supplementary datasets.
- For more information see their <u>website</u>
- MRLC Provided the data for the "Lack of Green Space" Dataset
 - Titled: NLCD 2019 Percent Developed Imperviousness (CONUS)
 - Download <u>here</u>



The Trust for Public Lands

The Trust for Public Lands

- The Trust for Public Lands assisted with data analysis for the "Lack of Green Space" Dataset
- Founded in 1972, The Trust for Public Lands works with communities to create parks and protect public land where they're needed most, as a matter of health, equity, and justice.
- The Trust for Public Land is an IRS approved 501(c)(3) tax-exempt organization.
- See their <u>website</u> for more information.
- They have several resources available:
 - o <u>Toolkits</u>
 - A <u>ParkScore Index</u> with park access levels for nearly every city and town in the United States
 - <u>LandVote</u>
 - The Conservation Almanac that tracks public spending
 - Note: you must <u>request access</u>
 - The <u>National Conservation Easement Database (NCED)</u> is the first national database of conservation easement information, compiling records from land trusts and public agencies throughout the United States.
 - Note: You must <u>create an account</u>



American Forests



American Forests

- American Forests assisted with data analysis for the "Lack of Green Space" Dataset
- American Forests is a nonprofit, tax-exempt charitable organization under Section 501(c)(3) of the U.S. Internal Revenue Code.
- Aside from their Justice40 work they have:
 - <u>Tree Equity Score</u>
 - <u>Reforestation Hub</u>
 - Vibrant Cities Lab
 - Research and Reports
- See their <u>website</u> for more information



U.S. Department of the Interior



Department of the Interior (DOI)

- On March 3, 1849, the last day of the 30th Congress, that a bill was passed to create the Department of the Interior to take charge of the Nation's internal affairs. (Source)
- The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated Island Communities.
- <u>About Page</u>
- <u>Resource Library</u>



DOI Office of Surface Mining Reclamation and Enforcement

- OSMRE was created under the Surface Mining Control and Reclamation Act of 1977 (SMCRA) to administer programs for controlling the impacts of surface coal mining operations.
- Primary responsibilities include assisting the states and tribes in developing and implementing programs for surface coal mining and reclamation operations to achieve the purposes of SMCRA.
- OSMRE Contact Us Map
- The OSMRE maintains the Abandoned Mine Land Inventory System (e-AMLIS)
 - CEJST Justice40 uses the e-AMLIS data from 2017
- The Abandoned Mine Land Inventory System (e-AMLIS) is a computer system used to store, manage, and report on the OSMRE Inventory of Abandoned Mine Land Problems.
 - This includes both problems in need of reclamation and those that have been reclaimed.
- Questions regarding e-AMLIS should be sent to the e-AMLIS Team at osm-amlis@osmre.gov.



Department of the Interior (DOI)

• e-AMLIS Access

- Public Access Link
- Authorized Personnel Access Link
- Note: Please read and understand the terms of use for this data as it comes with conditions and includes the following disclaimer at the time of this document:
 - All information, including personal information, placed or sent over this system may be monitored, and users of this system are reminded that such monitoring does occur. Therefore, there should be no expectation of privacy with respect to use of this system.



U.S. Army Corps of Engineers



U.S. Army Corps of Engineers

- George Washington appointed the first engineer officers of the Army on June 16, 1775, during the American Revolution, and engineers have served in combat in all subsequent American wars.
- The Army established the Corps of Engineers as a separate, permanent branch on March 16, 1802, and gave the engineers responsibility for founding and operating the U.S. Military Academy at West Point.
- <u>U.S. Army Corps of Engineers Digital Library</u>
- U.S. Army Corps of Engineers Website
- The U.S. Army Corps of Engineers contributed Formerly Used Defense Sites (FUDS) data from 2019



U.S. Army Corps of Engineers

- For more information on the FUDS Data see: LINK
- For the GIS Access Page and the GIS FAQs see this LINK
- For the FUDS Portal See: LINK
- For the Interactive GIS Map with the FUDS 2021 Data See: LINK
- To Download the FUDS Data See: LINK
 - Available in:
 - CSV
 - KML
 - Shapefile
 - GeoJSON
 - File Database
- You may need to click on the feature layer, and view the preview of the feature layer to find the option to download the above formats



Bureau of Indian Affairs



Bureau of Indian Affairs (BIA)

- Since its inception in 1824, the Bureau of Indian Affairs has been both a witness to and a principal player in the relationship between the Federal Government and Indian tribes and Alaska Native villages.
- The BIA has changed dramatically over the past 185 years, evolving as Federal policies designed to subjugate and assimilate American Indians and Alaska Natives have changed to policies that promote Indian self-determination.
- Bureau of Indian Affairs <u>Programs and Services</u>
- Bureau of Indian Affairs <u>Datasets available for Download</u>
- More information
- The Bureau of Indian Affairs contributed the Land Area Representation (LAR) dataset from 2018 to the Justice40 Initiative



LAR Dataset

- The purpose of the American Indian and Alaska Native Land Area Representation (AIAN-LAR) Geographic Information System (GIS) dataset is to depict the external extent of Federal Indian reservations and the external extent of associated land "held in trust" by the United States, "restricted fee" or "mixed ownership" status for Federally recognized tribes and individual Native Americans. This dataset includes other land area types such as Public Domain Allotments, Dependent Indian Communities and Homesteads.
- This GIS Dataset is prepared strictly for illustrative and reference purposes only and should not be used, and is not intended for legal, survey, engineering or navigation purposes.



U.S. Census Bureau



- The American Community Survey (ACS) is an ongoing survey that provides vital information on a yearly basis.
- Information from the survey generates data that help determine how more than \$675 billion in federal and state funds are distributed each year.
- The American Community Survey (ACS) helps local officials, community leaders, and businesses understand the changes taking place in their communities.
- Conducted every month, year, and ten-year census.



- Years 2000-2021 available in the data.census.gov portal
- Data availability will depend on topic of inquiry.
- If your address was selected for the American Community Survey, you are legally obligated to answer all the questions, as accurately as you can.
 - The relevant laws are Title 18 U.S.C Section 3571 and Section 3559, which amends Title 13 U.S.C. Section 221.
- Response to the survey is required by law because the American Community Survey is part of the decennial census, replacing the "long form" that previously was sent to a percentage of households once every 10 years.



- American Community Survey
 - Conducted every month, every year
 - Sent to a sample of addresses (about 3.5 million) in the 50 states, District of Columbia, and Puerto Rico
 - Asks about topics not on the 2020 Census, such as:
 - Education
 - Employment
 - Internet access
 - Transportation
 - Provides current information to communities every year.
 - Provides local and national leaders with the information for
 - Programs
 - Economic development
 - Emergency management
 - Understanding local issues and conditions
- Decennial Census
 - Conducted every ten years
 - Counts every person living in the 50 states, District of Columbia, and the five U.S. territories
 - Asked a shorter set of questions such as
 - Age
 - Sex
 - Race
 - Hispanic origin
 - Owner/renter status
 - Provides an official count of the population, which determines congressional representation.



• GENERAL TOPIC Categories

- Age and Sex
- Business and Economy
- Education
- Emergency Management
- Employment
- Families and Living Arrangements
- <u>Geography</u>
- <u>Health</u>
- Hispanic Origin
- Housing
- Income and Poverty
- International Trade
- Population
- Population Estimates
- Public Sector
- <u>Race</u>
- Redistricting
- <u>Research</u>
- Voting and Registration



Additional Resources

- Explore Census Data
- <u>Census Academy</u>
- <u>Combining Data</u>
- Data Equity Tools
- Data Tools and Apps
- Infographics and Visualizations
- Index of Topics
- Puerto Rico Community Survey
- Island Area Census
- <u>ACS 2015-2019 5-Year Estimates Information</u>
- <u>Census Narrative Profiles</u>



Federal Emergency Management Agency



FEMA History

- FEMA's mission is helping people before, during and after disasters, and our core values and goals help us achieve it.
- FEMA was officially created in 1979 through an executive order by President Jimmy Carter.
- On March 1, 2003, FEMA became part of the Department of Homeland Security.
- There are 10 regional offices located across the country.



FEMA National Risk Index

- The National Risk Index can be levered to support community prioritization of resilience efforts by providing an **at-a-glance overview of multiple natural hazard risk factors**.
- The Risk Index is accessible to anyone interested in mitigation or understanding the natural hazard risk in a community such as:
 - Public Employees
 - Local Officials
 - Community Planners
 - Academia
 - Homeowners and Renters



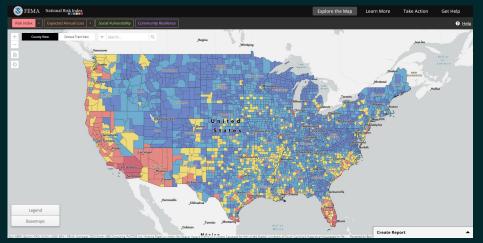
FEMA National Risk Index

- The National Risk Index is a dataset and online tool.
- It identified the communities most at risk for <u>18 natural hazards</u>.
- It was designed and built by FEMA with various stakeholders and partners in:
 - Academia
 - Local, state and federal government
 - Private industry
- **71** entities contributed to the development of the National Risk Index by providing domain expertise and/or data. <u>Source</u>
- Not available in Puerto Rico, or American Samoa



FEMA National Risk Index

- The National Risk Index interactive mapping and data-based interface enables users to visually explore individual datasets.
- Enables user to
 - assess a community's natural hazard risk
 - create reports to capture risk details on a community or conduct community-based risk comparisons
 - export data for analysis using other software



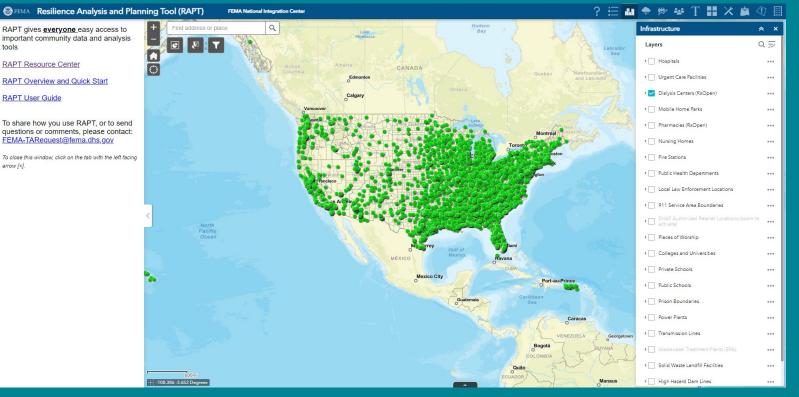


FEMA Resilience Analysis and Planning Tool (RAPT)

- The Resilience Analysis and Planning Tool gives everyone access to powerful data and GIS mapping that can help everyone understand their community.
- RAPT includes over 100 preloaded layers including community resilience indicators from peer-reviewed research, the most current census demographic data, infrastructure data, and data on weather, hazards, and risk. RAPT also includes easy to use analysis tools, the ability to add in data from other sources, and print and download functions. LINK
- RAPT Resource Center
- <u>RAPT MAP</u>



FEMA Resilience Analysis and Planning Tool (RAPT)





FEMA ClimRR Tool

- ClimRR the Climate Risk and Resilience Portal empowers individuals, governments, and organizations to examine simulated future climate conditions at mid- and end-of-century for a range of climate perils.
- ClimRR was developed by the <u>Center for Climate Resilience and Decision Science (CCRDS)</u> at Argonne National Laboratory in collaboration with AT&T and the United States Department of Homeland Security's <u>Federal Emergency Management Agency (FEMA)</u>.
- <u>ClimRR Info</u>
- <u>ClimRR Portal</u>
- <u>ClimRR Report Portal</u>







Home Science & Methodology 🗸

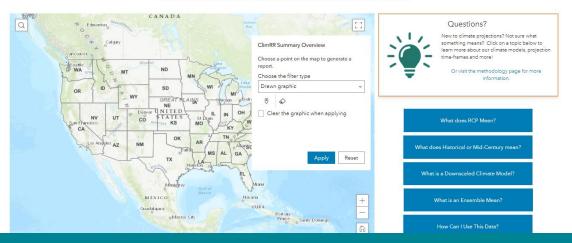
ClimRR Report Generator

Data Catalog Connect

ClimRR Data Explorers & Summary Tool

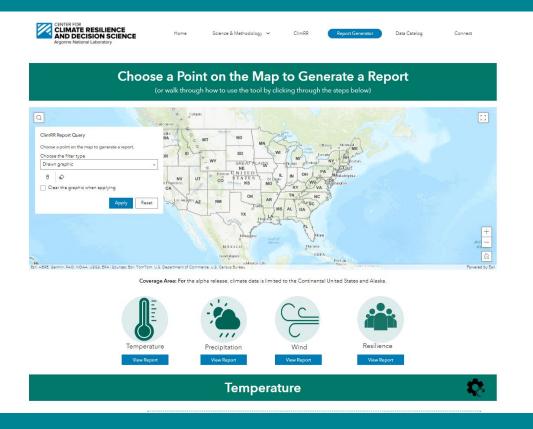
Draw a Point on the Map to Summarize Climate Projections

This tool is best experienced in your desktop browser. Mobile functionality may be limited.





ClimRR Report Portal





Additional Resources

- National Risk Index Map
- National Risk Index Overview
- National Risk Index Information
- Learn More about the National Risk Index
- National Risk Index Technical Documentation
- Risk Index Data Contributors
- <u>Understanding Scores</u>
- National Risk Index Technical Documentation PDF



Office of Energy Efficiency and Renewable Energy



Office of Energy Efficiency and Renewable Energy

- The Department of Energy (DOE) was renamed the Office of Energy Efficiency and Renewable Energy in 1993.
- EERE's mission is to accelerate the research, development, demonstration, and deployment of technologies and solutions to equitably transition America to net-zero greenhouse gas emissions no later than 2050.
- The Low-Income Energy Affordability Data (LEAD) Tool was created to help stakeholders understand housing and energy characteristics for low- and moderate-income households.
- Using data, maps, and graphs from the LEAD Tool, stakeholders can make data-driven decisions when planning for their energy goals.
- The Low-Income Energy Affordability Data comes primarily from the 2018 U.S. Census American Community Survey 5-Year Public Use Microdata Samples and is calibrated to 2018 U.S. Energy Information Administration electric utility (Survey Form-861) and natural gas utility (Survey Form-176) data



EERE LEAD Score

Geographic levels:

- National
- 50 States plus D.C. and Puerto Rico
- County
- City
- Census tract
- Includes Tribal areas
- Number of occupied housing units and energy expenditures by:
 - Tenure (homeowners or renters)
 - Building year of first construction
 - Number of units in the building
 - Housing unit primary heating fuel type
- Cost of energy:
 - Average monthly energy expenditures
 - Average energy burden as a percentage of income spent on energy
- Households at different income levels:
 - Area Median Income:
 - 0-30%
 - **30-60%**
 - 60-80%
 - **80-100%**
 - 100%+
 - Federal Poverty Level:
 - 0-100%
 - **100-150%**
 - **150-200%**
 - **200-400%**
 - **400%**+

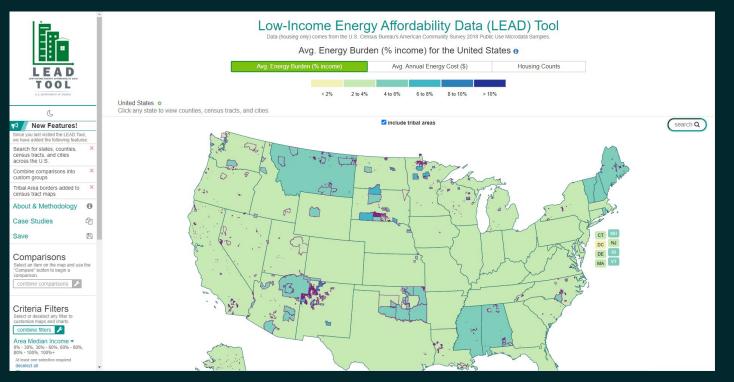


Office of Energy Efficiency and Renewable Energy LEAD Score

- The Low-income Energy Affordability Data (LEAD) Tool is an online, interactive platform that allows users to build their own profiles at the following levels:
 - National
 - State
 - County
 - City
 - Census tract profiles
- LEAD provides estimated low-income household energy data based on:
 - o Income
 - Energy expenditures
 - Fuel type
 - Housing type
- Users can:
 - Create and save their own profile
 - Make side-by-side comparisons with other geographies
 - Download visuals and data associated with included data on:
 - Geographies
 - Housing
 - Energy characteristics



EERE LEAD Tool





Additional Resources

- LEAD Tool
- LEAD Data Download
- ACS Info on LEAD
- LEAD Methodology
- LEAD Tool Youtube Tutorial
- LEAD Tool Webinar
- LEAD Tool Overview
- All State & Local Solution Center Resources
- EERE Initiatives and Projects
- EERE Timeline



Centers for Disease Control and Prevention



Centers for Disease Control and Prevention

- The CDC is one of the major operating components of the Department of Health and Human Services and is recognized as the nation's premiere health promotion, prevention, and preparedness agency.
- CDC is the nation's leading organization that protects the public's health.
- PLACES is a collaboration between CDC, the Robert Wood Johnson Foundation, and the CDC Foundation.



PLACES Data

- PLACES provides health data for small areas across the country.
 - This allows local health departments and jurisdictions to:
 - Understand the geographic distribution of health measures
 - Assist in planning public health interventions.
- PLACES is an expansion of the original <u>500 Cities Project</u> that began in 2015 and ended in 2020.
- The 500 Cities project was launched by the Centers for Disease Control and Prevention (CDC) in partnership with the Robert Wood Johnson Foundation (RWJF) and CDC Foundation.
- The 500 Cities Project provided city- and census tract-level small area estimates for the largest 500 cities in the United States:
 - Chronic disease risk factors
 - Health outcomes
 - Clinical preventive services use.
- In 2020, the project expanded to provide small area estimates (SAE) for counties, places, census tracts, and ZIP Code Tabulation Areas (ZCTA) across the entire United States.



PLACES Data Centers for Disease Control

- PLACES reports county-, place-, census tract-, and ZCTA-level data.
- PLACES uses small area estimation methods to obtain 29 (27 in the 2020 release) chronic disease measures for the entire United States.
- The data are published through a public, interactive "PLACES" website.
- Users can view, explore, and download data by:
 - County
 - Place
 - Census tract
 - ZCTA



PLACES Data Centers for Disease Control

- County: 3,142 counties within 50 states and District of Columbia (DC), including 9 county and city consolidated cities.
- Place: 28,484 of 29,321 Places or Census Designated Places (CDP) with a population of 50 or more from Census Tiger 2019 Places and CDPs based on the Census 2010 population count.
- Census tract: 72,337 of 73,057 census tracts in the 50 states and Washington, DC that have a Census 2010 population of 50 or more people. Compared with the original 500 Cities Project in which estimates were made only for the part of tracts within cities, this project will provide the estimates for the entire census tract regardless of city boundaries.
- ZCTA: 32,409 of 32,989 ZCTAs in the 50 states and Washington, DC with Census 2010 population of 50 or more people. (<u>Source</u>)



PLACES Data Centers for Disease Control

- PLACES Data
- PLACES Index
- CDC Data and Statistics
- CDC Data Portal
- One Page Fact Sheet PDF
- PLACES Measure Definitions
- PLACES Methodology
- CDC Programs and Interventions
- SDOH and PLACES Data
- PLACES Multimedia



U.S. Small-area Life Expectancy Estimates Project (USALEEP)

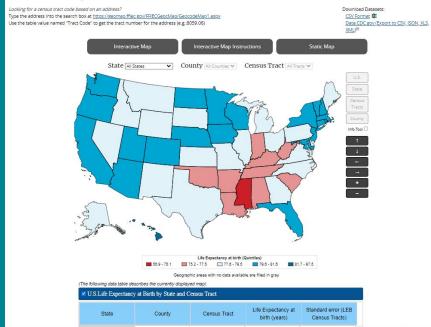
- The USALEEP project produced estimates of life expectancy at birth—the average number of years a person can expect to live—for most of the census tracts in the United States for the period 2010-2015.
- The U.S. Small-area Life Expectancy Estimates Project (USALEEP) is a partnership of NCHS, the <u>Robert Wood</u> <u>Johnson Foundation (RWJF)</u> and the <u>National Association for Public Health Statistics and Information Systems</u> (NAPHSIS)
- The <u>USALEEP interactive United States map</u> shows estimates of U.S. life expectancy at birth by state and census tract for the period 2010-2015 (1-2).
 - Data is available for download directly from this page
 - Alternate data download link in additional resources
- Estimates were produced for 67,148 census tracts, covering all states and the District of Columbia (D.C.).



USALEEP MAP

Life Expectancy at Birth for U.S. States and Census Tracts, 2010-2015

This interactive United States may show settimetes of U.S. Iffe expectancy at birth by state and ensus tract for the period 2010-2015 (-1). Estimates were produced for 7/1, 48 ensus tracts, covering all races and the District of Columbia (States) are used to expect the collaborative portion (-1). <u>Small areas Utile Spectancy Estimates Project (UEX)(ES)</u> between the National Center for Health Statistics (NCHS), the National Association for Public Health Statistics and Information Spectrem (MAPHSIG) and the Robert (Wood (Dintona Foundation (WSH) (2).





Additional Resources

- USALEEP Metholodolgy PDF
- USALEEP Methods Webpage
- Direct USALEEP Data Download
- Interactive Map and Data Download

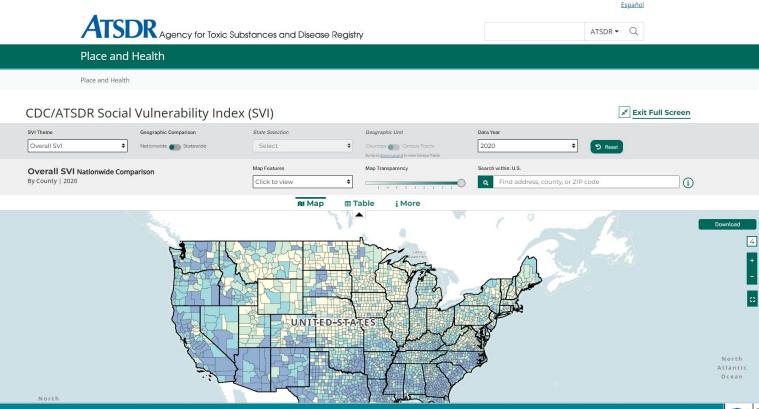


CDC/ATSDR Social Vulnerability Index

- <u>SVI Information Link</u>
- Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss.
- The CDC/ATSDR Social Vulnerability Index (CDC/ATSDR SVI) uses 16 U.S. census variables to help local officials identify communities that may need support before, during, or after disasters.
- Data is available for:
 - o 2000
 - o 2010
 - o **2014**
 - o 2016
 - o 2018
 - o 2020
- Geographies Available
 - All 50 states (aggregated and individually)
 - Puerto Rico
 - Census Tracts
 - Counties
- File Formats
 - CSV
 - Shapefile
- <u>CDC SVI Interactive Map</u>



CDC SVI Interactive Map



RESILIENT AMERICAN 141

U.S. Department of Housing and Urban Development



Comprehensive Housing Affordability Strategy Dataset HUD

- CHAS data can demonstrate the number of households in need of housing assistance.
- This is estimated by the number of households that have certain housing problems and have income low enough to qualify for HUD's programs such as:
 - Elderly households
 - Disabled households
 - Minority households
 - 30 percent of median income
 - 50 percent of median income
 - 5 80 percent of median income
- CHAS data provides counts of the numbers of households that fit these HUD-specified characteristics in HUD-specified geographic areas.
- In addition to estimating low-income housing needs CHAS data contains:
 - lead paint risks
 - "affordability mismatch
 - affordability with variables like:
 - age of homes
 - number of bedrooms
 - and type of building
- On September 9, 2022 HUD released updated CHAS data based on 2015-2019 ACS 5-year estimates
- <u>GIS CHAS Feature Layer</u>



Additional Information

- CHAS Data Information and Data Download Link
- <u>CHAS API for Data Querying</u>
- <u>CHAS Data Documentation</u>
- CHAS Background
- <u>CHAS Overview</u>
- HUD Data Portal
- HUD Datasets
- CHAS ArcGIS Map
- <u>HUD Topics</u>
- <u>HUD.gov</u>



HUD Location Affordability Index

- Housing and transportation costs consume about half of the average household budget, but it can be difficult for people to fully factor transportation costs into decisions about where to live and work.
- The Location Affordability Index (LAI) works to close this gap by providing estimates of household housing and transportation costs at the neighborhood level along with constituent data on the built environment and demographics.
- This site provides access to that data as well as comprehensive documentation of how the Location Affordability Index has been developed and updated. <u>LINK</u>
- Data is available through the through HUD's eGIS Storefront: LINK
- The data is available in the following formats:
 - CSV
 - KML
 - Shapefile
 - GeoJSON
 - File GeoDatabase



Environmental Protection Agency



EPA History

- The mission of EPA is to protect human health and the environment.
- The EPA works to ensure that:
 - Americans have clean air, land and water;
 - National efforts to reduce environmental risks are based on the best available scientific information;
 - Federal laws protecting human health and the environment are administered and enforced fairly, effectively and as Congress intended;
 - Environmental stewardship is integral to U.S. policies concerning natural resources, human health, economic growth, energy, transportation, agriculture, industry, and international trade, and these factors are similarly considered in establishing environmental policy;
 - All parts of society--communities, individuals, businesses, and state, local and tribal governments--have access to accurate information sufficient to effectively participate in managing human health and environmental risks;
 - Contaminated lands and toxic sites are cleaned up by potentially responsible parties and revitalized; and
 - Chemicals in the marketplace are reviewed for safety.



EJ Screen Lmitations

- EPA EJScreen was developed by EPA to highlight places that **may be candidates for further review, analysis or outreach** to support the agency's environmental justice work.
- Development of EJScreen began in late 2010 and EPA began using an early version in 2012. EJScreen was peer reviewed in early 2014, and **released to the public in 2015.** Since the public release, EJScreen has been and will continue to be **updated annually** with the newest and best data available.
- EJScreen is a screening tool that examines *some* of the relevant issues related to environmental justice, and there is uncertainty in the data included.
- Environmental indicators are only screening-level proxies for actual health impacts.
- Some estimates have substantial uncertainty because the following indicators are uncertain:
 - Emissions
 - Ambient levels in the air
 - Exposure of individuals
 - Toxicity

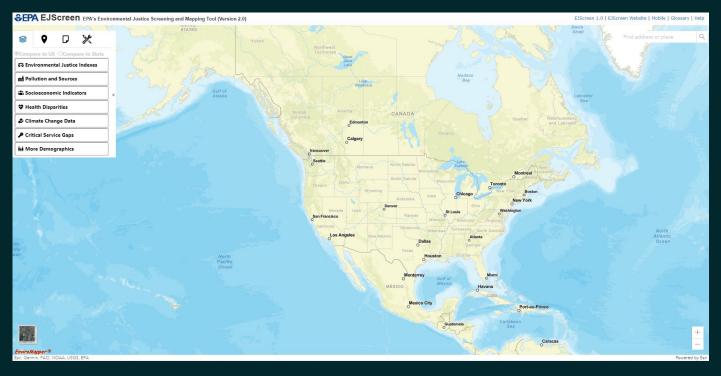


EPA EJScreen

- EJScreen is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators.
- All of the EJScreen indicators are publicly-available data.
- EJScreen includes:
 - <u>12 environmental indicators</u>
 - <u>7 demographic indicators</u>
 - <u>12 EJ indexes</u>
 - <u>12 supplemental indexes</u>
- Each EJ index combines demographic indicators with a single environmental indicator.
- This tool uses provides a number of capabilities including:
 - Color coded mapping
 - The ability to generate a standard report for a selected area
 - Comparisons showing how a selected area compares to the state, EPA region or the nation



EPA EJScreen





Additional Resources

- EPA EJScreen Map
- EPA EJScreen Data Download
- EPA EJScreen Data Download 2
- EPA EJScreen Technical Documentation
- EPA Data Portal
- EPA Open Data
- EPA Datasets
- EPA Certifications
- EPA Topic Index
- EPA Open Data
- EPA EJScreen About
- EPA Mission
- EPA EJScreen Youtube Tutorial
- EPA EJScreen Caveats and Limitations
- What is EPA EJScreen?
- EPA EJScreen Development



EPA NATA

- NATA is a screening tool, intended to help EPA and state, local and tribal air agencies determine if areas, pollutants or types of pollution sources need to be examined further to better understand risks to public health.
- The 2014 NATA used the 2014 National Emissions Inventory (NEI) as a starting point.
- The NEI is EPA's comprehensive estimate of air pollution emissions from sources across the country.
- These data were updated from comments provided by state, local and tribal agencies during the NATA review. The resulting emission files, accessed below, reflect the emissions used in NATA.
- The most recent national screening assessment is the Air Toxics Screening Assessment, or AirToxScreen.



Additional Resources

- EPA NATA Webpage
- 2014 NATA Results
- NATA Fact Sheet
- Previous NATA Versions
- NATA Results Summary PDF
- <u>1996 NATA Data</u>



EPA Air Toxics Screening Assessment

- Not included in the Justice40 Calculation
- Taken in 2018 with potentially more up to date information for your needs
- <u>AirToxScreen</u>



EPA Risk-Screening Environmental Indicators (RSEI) Model

- A RSEI Score is a unitless value that accounts for the:
 - Size of the chemical release
 - Fate and transport of the chemical through the environment
 - Size and location of the exposed population
 - Chemical's toxicity
- A RSEI Score is calculated as toxicity weight multiplied by the exposed population multiplied by the estimated dose.
- RSEI Scores are only meaningful in comparison to other RSEI Scores.
- Ranking facilities, chemicals, industries, or other aggregations by RSEI Score can highlight situations that might warrant concern and need additional investigation.
- RSEI does not perform a risk assessment, but is rather a screening-level tool to help identify situations of potential concern.



EPA Risk-Screening Environmental Indicators (RSEI) Model

• Using RSEI to Explore TRI Data

- RSEI helps users to:
- Look at trends in RSEI Score over time and across sectors, chemicals, facilities and locations;
- Rank and prioritize chemicals, industry sectors, and locations for strategic planning;
- Support community-based projects; and
- Highlight situations with higher relative RSEI Scores that may warrant further investigation to better assess potential chronic human health risks.



EPA Risk-Screening Environmental Indicators (RSEI) Model

• Some Limitations of RSEI

- As with any model, RSEI is subject to the limitations of the underlying data sources and models that it incorporates, in addition to its own limitations:
- RSEI relies exclusively on TRI-reported data (TRI-listed chemicals reported by TRI-regulated facilities) for release quantities; TRI does
 not include all toxic chemicals or all sources of risk from environmental pollution. (Read about factors to consider when using TRI data.)
- A low RSEI Score indicates low potential concern from reported TRI releases, but other kinds of environmental risk may also be present.
- RSEI does not provide RSEI Scores for all TRI chemicals because information required for modeling, such as toxicity data, is not available for every chemical.
- RSEI does not cover all exposure routes or all health effects.
- <u>RSEI toxicity weights</u> are based only on chronic human toxicity and do not address acute human toxicity or environmental toxicity.
- Dermal and food ingestion pathways (other than fish consumption) and other indirect exposure pathways are not evaluated.
- RSEI does not produce risk estimates such as excess cancer cases. RSEI Scores are unitless and are only meant for comparison to other RSEI Scores.
- RSEI uses a number of simplifying assumptions.



EPA Risk-Screening Environmental Indicators (RSEI) Model

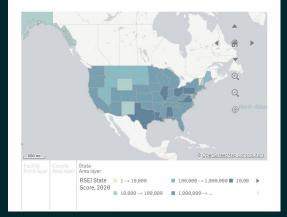
RSEI Results Map

<u>RSEI Map</u>

Risk-Screening Environmental Indicators (RSEI): Explore RSEI Scores for Facilities, Counties and States for 2020

Click on a state below to see its RSEI Score compared to the RSEI Score of other states. Select a state or county at the bottom of the map or zoom in on the map using the plus sign to see rankings for counties and individual facilities. <u>More information to help you understand RSEI</u> results.

Note: It may take a moment for the map to load.





EPA Risk-Screening Environmental Indicators (RSEI) Model

- RSEI Results Map
- <u>EasyRSEI</u>
- <u>Risk-Screening Environmental Indicators (RSEI) Methodology Version 2.3.10</u>
- EasyRSEI Basics
- How RSEI Should be Used
- Youtube Video RSEI Modeling
- RSEI AWS Open Data
- RSEI AWS Open Data 2
- Github RSEI Open Data
- RSEI and NATA
- Youtube Video Understanding RSEI Results
- Understanding RSEI Results
- <u>TRI-Listed Chemicals</u>
- TRI and RSEI
- <u>TRI Program</u>
- TRI Tools and Data
- Learn About RSEI



RCRA Info

- RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984.
- The RCRAInfo system enables cradle-to-grave waste tracking of many types of information regarding the regulated universe of RCRA hazardous waste handlers.
- RCRAInfo characterizes:
 - Facility status
 - Regulated activities
 - Compliance histories
 - Detailed data on the generation of hazardous waste from large quantity generators
 - Waste management practices
 - Treatment
 - Storage
 - Disposal facilities
- Mandatory data elements must be entered into RCRAInfo within 30 days of the occurrence of an activity (or within 60 days for States that have their own State data systems and must translate the information to RCRAInfo).
- RCRAInfo data are increasingly being relied on by many stakeholders for a wide variety of purposes.



RCRA Info

- The following are generally required to provide information about their activities to state environmental agencies:
 - Generators of hazardous waste
 - Transporters of hazardous waste
 - Treaters of hazardous waste
 - Storers of hazardous waste
 - Disposers of hazardous waste

• Use the RCRAInfo Search to determine identification and location data:

- Specific hazardous waste handlers
- Information on treatment, storage, and disposal facilities
 - Permit/closure status
- Compliance with Federal and State regulations
- Cleanup activities



EPA RCRA Info

- RCRA Info
- RCRA Info Search
- <u>Restricted Access to Professionals Login</u>



CERCLIS/Superfund

- Congress established the <u>Comprehensive Environmental Response</u>, <u>Compensation and Liability Act</u> (<u>CERCLA</u>) in 1980.
- Thousands of contaminated sites exist nationally due to hazardous waste being dumped, left out in the open, or otherwise improperly managed.
- These sites include:
 - Manufacturing facilities
 - Processing plants
 - Landfills
 - Mining sites
- CERCLA is informally called Superfund.



CERCLIS/Superfund

- CERCLA allows the EPA to clean up contaminated sites.
- It also forces the parties responsible for the contamination to either perform cleanups or reimburse the government for EPA-led cleanup work.
- The SEMS Search allows you to retrieve Superfund data from the Superfund Enterprise Management System (SEMS) database in Envirofacts.
- CERCLIS is the Comprehensive Environmental Response, Compensation, and Liability Information System.
- CERCLIS contains information on hazardous waste sites, site inspections, preliminary assessments and remedial status.



EPA CERCLIS Info (as in CERJST)/ SEMS

- Search for Superfund Sites Where You Live
- SEMS Search
- Search Superfund Site Information
- What is Superfund?
- CERCLIS Info



EPA RMP Database

- Risk Management Plans (RMPs) prepared and submitted pursuant to CAA section 112(r) are, by statute, available to the public.
- Members of the general public may obtain RMP data by visiting a designated federal reading room or by contacting their <u>SERC</u> or <u>LEPC</u> public contact. Information on <u>federal reading rooms for RMPs</u> is available.
- A member of the general public may also submit an official FOIA request to obtain non-OCA RMP data. Information on how to submit a FOIA request is available at the following URL: www.foia.gov
- In addition, any person may contact a facility directly to request the facility's RMP information. However, facility owners and operators are not required to give their facilities' RMP information directly to the public.
- Anyone may contact the RMP Reporting Center to inquire and receive a "yes" or "no" answer regarding whether a specific facility has submitted an RMP. The RMP Reporting Center can be reached at (703) 227-7650 or RMPRC@epacdx.net.



EPA RMP Database

- Section 112(r) of the Clean Air Act Amendments requires EPA to publish regulations and guidance for chemical accident prevention at facilities that use certain hazardous substances. These regulations and guidance are contained in the Risk Management Program (RMP) rule.
- The RMP rule requires facilities that use extremely hazardous substances to develop a Risk Management Plan which:
 - identifies the potential effects of a chemical accident,
 - identifies steps the facility is taking to prevent an accident, and
 - spells out emergency response procedures should an accident occur.
- These plans provide valuable information to local fire, police, and emergency response personnel to prepare for and respond to chemical emergencies in their community.



EPA RMP Database

- Accessing RMP Data
- <u>Risk Management Program (RMP) Rule</u>
- Risk Management Program (RMP) Rule Overview
- <u>RMP Information Center</u>

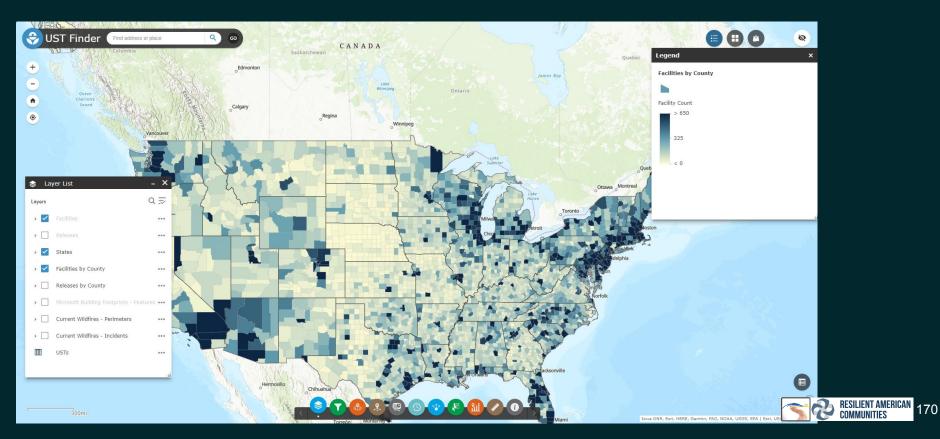


EPA UST Finder

- EPA developed UST Finder, a web map application containing a comprehensive, state-sourced national map of underground storage tank (UST) and leaking UST (LUST) data. It provides the attributes and locations of active and closed USTs, UST facilities, and LUST sites from states as of 2018-2019 and from Tribal lands and US territories as of 2020-2021. UST Finder contains information about proximity of UST facilities and LUST sites to: surface and groundwater public drinking water protection areas; estimated number of private domestic wells and number of people living nearby; and flooding and wildfires. UST Finder can import additional data layers and export UST facility and LUST site information for use by other software programs.
- <u>UST Mapper</u>
- Instructional Videos EPA developed three instructional videos for UST Finder
 - o <u>Part 1</u>
 - <u>Part 2</u>
 - <u>Part 3</u>







Department of Transportation



Department of Transportation

- Goal of the DOT is "To deliver the world's leading transportation system, serving the American people and economy through the safe, efficient, sustainable, and equitable movement of people and goods."
- Operating Administrations
 - o <u>FAA</u>
 - <u>FHWA</u>
 - <u>FMCSA</u>
 - <u>FRA</u>
 - <u>FTA</u>
 - <u>GLS</u>
 - <u>MARAD</u>
 - <u>NHTSA</u>
 - <u>OIG</u>
 - <u>OST</u>
 - PHMSA



Traffic proximity and volume

- The <u>DOT</u> has several online tools and datasets available to the public.
- The CEJST specifically states "Traffic proximity and volume"
 - This is stated as "Source: Traffic data from 2017 as compiled by EPA's EJScreen"
- Bureau of Transportation Statistics
 - Keyword "traffic proximity and volume" yields 21 datasets in the data.gov department of transportation page



Transportation Access Disadvantage from 2022

• DOT Justice 40 Info

- Transportation access disadvantage identifies communities and places that spend more, and take longer, to get where they need to go and consists of:
 - Homes Built Before 1960
 - Percent of housing units built before 1960 (lead paint indicator)
 - Diesel
 - EJ Index for Diesel particulate matter level in air
 - Cancer
 - EJ Index for Air toxics cancer risk
 - Traffic Proximity
 - EJ Index for Traffic proximity and volume
 - PM25
 - EJ Index for PM2.5 level in air
 - Ozone
 - Ozone level in air



Additional Resources

- DOT Data Inventory
- <u>DOT Websites and Digital Services</u>
- ITS Datahub
- Bureau of Transportation Statistics
- DOT Geospatial and Map Gallery
- <u>About DOT</u>



What do I do if I cannot find data for my area?

- 1. Look at government data at all levels
 - a. City
 - b. County
 - c. State
 - d. Federal
- 2. Search for your geography in data discovery tools
- 3. Look at individual agency data
- 4. Consider other data sources keeping in mind:
 - a. Usage ability
 - b. Giving credit to the data source
 - c. Data limitations
 - i. Limited Geography
 - ii. Required work (geo-coding, data remediation)
 - iii. Effective time you can use said data
 - 1. COVID-19 vaccination data may quickly be out of date
 - iv. Older collection period
- 5. If a dataset is unavailable with a contact owner option, see the Data Access Slide about contacting Dataset Owners



Additional Resources



Additional Data Sources

- American Samoa CMSP Data Portal
- <u>U.S. Census Bureau (Specify Geography)</u>
- <u>2020 Island Areas Censuses: American Samoa</u>
- Island Areas American Samoa Dataset
- 2020 Census: Conducting and Motivating the Count: Counting the Island Areas
- 2010 Census Guam
- Our World in Data (Search your geography)
- 2010 Island Areas Commonwealth of the Northern Mariana Islands Dataset
- <u>2010 Island Areas U.S. Virgin Islands Dataset</u>
- <u>American Samoa GDP</u>
- <u>USGS Water Data for American Samoa</u>
- <u>USGS Current Water Data for American Samoa</u>
- Global Health Data Exchange
- NOAA Benthic Mapping for Coastal Managers
- <u>American Indian and Alaska Native Summary File Dataset</u>
- <u>American Indian and Alaska Native Data Links</u>
- <u>Data.gov</u>



Additional Data Source (Cont.)

- <u>Census Geocoder</u>
- Census Glossary
- Zipcode-ZCTA Crosswalk
- <u>State FIPS Codes</u>
- States and Counties FIPS
- <u>County FIPS Cose</u>
- <u>American National Standards Institute (ANSI) and Federal Information Processing Series</u> (FIPS) Codes
- Zip Code Tabulation Areas
- GIS Info National Geographic
- USGS Info GIS
- ESRI GIS Overview
- <u>Gazetter Files</u>
- US Census Geographic Codes



Organizations that may be helpful

- UDS Mapper
 - FQHC Health Data
 - UDS Mapper Tutorials
 - DUDS Mapper Resources
- USGS
 - Geologic Data
 - <u>USGS Data Catalog Information</u>
 - USGS Data Catalog
- Library of Congress
 - Dataset Guide
 - <u>Citing Datasets Guidance</u>
- EPA IAQ
 - <u>https://www.epa.gov/education/supporting-healthy-houses-worship</u>
 - <u>https://www.energystar.gov/campaign/home?s=mega</u>
 - <u>https://www.energystar.gov/congregation</u>
 - https://www.energystar.gov/buildings/tools-and-resources/energy-star-commercial-buildings-college-course
 - <u>https://www.epa.gov/system/files/documents/2022-04/faqs_ejsg-2022.pdf</u>
 - <u>https://www.epa.gov/environmentaljustice/environmental-justice-small-grants-program</u>
 - <u>https://www.epa.gov/environmentaljustice/environmental-justice-grants-funding-and-technical-assistance</u>
 - <u>https://www.epa.gov/smartgrowth/building-blocks-sustainable-communities</u>



Further RAC Trainings

- For further RAC trainings please see the <u>RAC Events Calendar</u> to see our available trainings.
- To see this presentation go to the Data Key in the <u>RAC Justice40 Data</u> <u>Attribution Guide</u>



RAC Resource Hub

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 - Alternatively see the Trainings Page at this Link



Acknowledgements

- This presentation prepared for Resilient American Communities by Heron Bridge Education, LLC.
- Thank you for your time.
- Please feel free to contact me at lbooherhbe@gmail.com
 - If applicable please include the information in the How to Provide Feedback Section of this Resource.



