

Category	Variable Name
County Identification	CountyFIPS
	State
Socioeconomics	County
	PopulationSize
	PopulationChangeRate_2010_2020
	PopulationChangeRate_2020_2021
	GDP_2021_thousands
	GDP_staterank2021
	GDP_pctchange_2020_2021
	GDP_pctchange_staterank2021
	TribeName
	TribeAcres
	DAC_StatusYES_NumTracts
	DAC_StatusYES_PctTracts
	SVI_OverallRanking
	SVI_Socioeconomic
	SVI_HouseholdCharacteristics
	SVI_MinorityStatus
	SVI_HousingTransportation
	PctAge65andOlder
	PctUnderAge18
	PctBlackNonHispanic
	PctHispanic
	PctNativeAmerican
	PctWhiteNonHispanic
	PctMultipleRace
	PctLimitedEnglishSpeaking
	PctForeignBorn
	PctLessThanHS
	PctHSDiplomaOnly

PctSomeCollege

PctAssocDegree

PctCollegePlus

MedianHHInc

PovertyRate

EnergyBurden

UnemploymentRate

Literacy_AvgScore

Literacy_PctLevel1

Literacy_PctLevel2

Literacy_PctLevel3

Numeracy_AvgScore

Numeracy_PctLevel1

Numeracy_PctLevel2

Numeracy_PctLevel3

Health & Wellbeing HealthRank_HealthOutcomes

HealthRank_LengthOfLife

HealthRank_QualityOfLife

HealthRank_HealthFactors

HealthRank_HealthBehaviors

HealthRank_ClinicalCare

HealthRank_SocialEconomicFactors

HealthRank_PhysicalEnvironment

Cancer_PctTractsOver75thPctile

Respiratory_PctTractsOver75thPctile

DieselPM_PctTractsOver75thPctile

PM25_PctTractsOver75thPctile

Ozone_PctTractsOver75thPctile

LeadPaint_PctTractsOver75thPctile

NPL_PctTractsOver75thPctile

RMP_PctTractsOver75thPctile

TSDF_PctTractsOver75thPctile

UST_PctTractsOver75thPctile

Wastewater_PctTractsOver75thPctile

ClimateLifeLoss_PctTractsOver75thPctile

Uninsured_PctTractsOver75thPctile

FoodDesert_PctTractsOver75thPctile

NoInternet_PctTractsOver75thPctile

Jobs & Workforce

Over30minCommute_PctTractsOver75thPctile

AvgCommute_mins

TotalWorkforce

FossilEmpRank_PctTractsOver75thPctile

CoalEmpRank_PctTractsOver75thPctile

PctEmpExtraction

Energy Infrastructure &
Potential

PctJobs_ManagementBusinessFinancial
PctJobs_ComputerEngineeringScience
PctJobs_EducationLegalArtsMedia
PctJobs_Healthcare
PctJobs_Service
PctJobs_SalesOffice

PctJobs_NaturalResourcesConstructionMaintenance

PctJobs_ProductionTransportation
OutageNumber

OutageDuration

NameplateCapacity_Total_MW

NameplateCapacity_X_MW

Pct_NameplateCapacity_X

Oil_BBL_2022
Oil_Condensate_BBL_2022
Gas_Casinghead_MCF_2022
Gas_GW_MCF_2022
Gas_MCF_2022

ElectricalPowerTransmissionLine_km
ElectricalPowerTransmissionLine_miles
CrudeOilPipeline_km
CrudeOilPipeline_miles
PetroleumPipeline_km
PetroleumPipeline_miles
NaturalGasPipeline_km
NaturalGasPipeline_miles
CO2Pipelines_km
CO2Pipelines_miles

UtilityPV_TechPotential

ResidentialPV_TechPotential

CommercialPV_TechPotential

LandbasedWind_TechPotential

DistributedWind_TechPotential

GeothermalHeatPump_EconPotential

Description

5-digit Federal Information Processing Standards (FIPS) at the county level

State abbreviation (TX or NM)

County name

Population estimates

Population change from 2010 to 2020 as a percentage of the initial population

Population change from 2020 to 2021 as a percentage of the initial population

Gross domestic product (GDP) in thousands of chained 2021 dollars

State-level GDP rank

Percent change from 2020 to 2021

State-level GDP change rank

Name of tribe(s) by county (if any)

Acres of tribe(s) by county (if any)

Number of census tracts within a county that are designated as disadvantaged communities (DACs). DAC status is a yes/no designated assigned by the U.S. federal government using cumulative burden across indicators related to climate change impacts, energy, air quality, pollution, health, housing, transportation, and workforce development.

Percent of census tracts within a county that are designated as DACs (see above)

Composite Social Vulnerability Index (SVI) score that ranks communities based on four vulnerability themes (described below). The national percentile scores range from 0 (low vulnerability) to 1 (high vulnerability).

The socioeconomic theme includes national percentiles for: below 150% poverty, unemployed, housing cost burden, no high school diploma, and no health insurance.

The household characteristics theme includes national percentiles for: aged 65 or older, aged 17 or younger, civilian with a disability, single-parent households, and English language proficiency.

The minority status theme includes national percentiles for: racial and ethnic minority status, including Hispanic or Latino, Black and African American, American Indian or Alaska Native, Asian, and Native Hawaiian.

The housing & transportation theme includes national percentiles for multi-unit structures, mobile homes, crowding, no vehicle, and group quarters.

Percent of county population age 65 or older

Percent of county population under age 18

Percent of population that identifies as Black and Non-Hispanic

Percent of population that identifies as Hispanic

Percent of population that identifies as Native American

Percent of population that identifies as White and Non-Hispanic

Percent of population that identifies with multiple races

Percent of population with limited English-speaking ability

Percent of population not born in the U.S.

Percent of population with less than a high school (HS) education

Percent of population with a HS diploma

Percent of population with some college education

Percent of population with an associate's degree

Percent of population with a four-year college degree or higher

Median household (HH) income in 2021 dollars

Percent of population living in families with income below their poverty threshold

Percent of household income spent on household energy costs. A score of greater than 6% is considered high.

Percent of county labor force who were unemployed and looking for work

Model-based literacy score, ranging from 0 (low proficiency) to 500 (high proficiency)

Percent of county adult population with a modeled literacy score below 226 points.

DOEd notes that "adults at this level can be considered at risk for difficulties using or comprehending print material. Adults at the upper end of this level can read short texts, in print or online, and understand the meaning well enough to perform simply tasks, such as filling out a short form, but drawing inferences or combining multiple sources of text may be too difficult. Adults who are below Level 1 may only be able to understand very basic vocabulary or find very specific information on a familiar topic. Some adults below Level 1 may struggle even to do this and may be functionally illiterate."

Percent of county adult population with a modeled literacy score greater than 226 points but less than 276 points. DOEd notes that "adults at this level can be considered nearing proficiency but still struggling to perform tasks with text-based information. Such adults may be able to read print and digital texts, relate multiple pieces of information within or across a couple documents, compare and contrast, and draw simple inferences. They can navigate in a digital environment to access key information, such as finding two main benefits of one product over another. However, more complex inferencing and evaluation may be too difficult."

Percent of county adult population with a modeled literacy score above 276 points.

DOEd notes that "adults at this level can be considered proficient at working with information and ideas in text. They have a range of higher literacy skills from the ability to understand, interpret, and synthesize information across multiple, complex texts to the ability to evaluate the reliability of sources and infer sophisticated meanings and complex ideas from written sources."

Model-based numeracy score, ranging from 0 (low proficiency) to 500 (high proficiency)

Percent of county adult population with a modeled numeracy score below 226 points.

DOEd notes that "adults at this level can be considered at risk for difficulties with numeracy. Adults at the upper end of this level can understand how to add, subtract, multiply, and divide and can perform basic one-step mathematical operations with given values or common spatial representations (e.g., calculate how many bottles of soda are in a full box with two levels when only the top level can be seen). Adults who are below Level 1 may only be able to count, sort, and do basic arithmetic operations with simple whole numbers and may be functionally innumerate."

Percent of county adult population with a modeled numeracy score greater than 226 points but less than 276 points. DOEd notes that "adults at this level can be considered nearing proficiency but still struggling to perform numeracy tasks. Such adults can successfully perform tasks requiring two or three steps involving calculations with whole numbers and common decimals, percentages, and fractions. They can conduct simple measurement and interpret relatively simple data and statistics in texts, tables, and graphs. However, more complicated problem solving (where the information is not explicit or is in an unfamiliar context) may be too difficult."

Percent of county adult population with a modeled numeracy score above 276 points. DOEd notes that "adults at this level can be considered proficient at working with mathematical information and ideas. They have a range of numeracy skills from the ability to recognize mathematical relationships and apply proportions to the ability to understand abstract representations of mathematical concepts and engage in complex reasoning about quantities and data."

County rankings assigned within states based on length of life and quality of life (described below). The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Health ranking for length of life, including premature deaths such as child and infant mortality. The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Health ranking for quality of life, which is measured using low birthweights, diabetes prevalence, HIV prevalence, and perceptions of health, including physical health, mental health, and distress. The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

County rankings assigned within states based on health behaviors, clinical care, social & economic factors, and physical environment (described below). The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Health ranking for healthy behaviors, including tobacco use, diet and exercise, alcohol and drug use, and sexual activity. The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Health ranking for clinical care, including access to care and quality of care. The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Health ranking for social and economic factors, including education, employment, income, family and social support, and community safety. The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Health ranking for physical environment, including air and water quality, housing, and transportation. The ranks are state-level, meaning that a county with a rank of 1 is the healthiest within their state.

Air toxics cancer risk, assessed by EPA's EJScreen using lifetime cancer risk from the inhalation of air toxics. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for air toxics cancer risk, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Air toxics respiratory hazard, assessed by EPA's EJScreen using the ratio of exposure concentration to a health-based reference concentration. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for air toxics respiratory hazard, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Diesel particulate matter (PM), assessed by EPA's EJScreen using the diesel particulate matter level in the air. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for diesel PM, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Particulate matter 2.5 (PM2.5), assessed by EPA's EJScreen using particulate matter levels in the air. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for PM2.5, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Ozone concentrations, assessed by EPA's EJScreen using the summer average of daily maximum 8-hour concentrations of ozone. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for ozone concentrations, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Lead paint indicator, assessed by EPA's EJScreen using the percent of housing units built before 1960. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for lead paint, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Proximity to national priority list (NPL) sites, assessed by EPA's EJScreen using the count of proposed or listed superfund sites within 5 km of a census tract divided by the distance. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for NPL proximity, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Proximity to risk management plan (RMP) facilities, assessed by EPA's EJScreen using the count of facilities with accident management plans within 5 km of a census tract divided by the distance. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for RMP proximity, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Proximity to treatment storage disposal facilities (TSDFs), assessed by EPA's EJScreen using the count of hazardous waste facilities within 5 km of a census tract divided by the distance. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for TSDF proximity, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Proximity to underground storage tanks (USTs), assessed by EPA's EJScreen using the county of USTs and leaking USTs. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for UST proximity, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Wastewater discharge, assessed by EPA's EJScreen using toxic concentrations at stream segments within 500 m of a census tract divided by the distance. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for wastewater discharge, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Expected annual loss of life (fatalities and injuries) from 18 different climate hazards. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for climate hazards loss of life, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Percent of population without health insurance coverage. This score was originally at the tract level. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for uninsured population, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Share of neighborhood without access to affordable or good-quality fresh food operationized as the percentage who live within 1/2 mile (urban) or 10 miles (rural) of a supermarket. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for food desert, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Percent of households with no internet access. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for no internet, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Percent of total population with a drive time to employment greater than or equal to 30 minutes. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for long commute, meaning that the tract scored higher (i.e., worse) than 75% of tracts in the country.

Average travel time to work in minutes for workers 16 years and over

Total number of the employed population 16 years old and older

Percent of total civilian jobs in the fossil energy sector. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for fossil employment, meaning that the tract scored higher than 75% of tracts in the country.

Percent of total civilian jobs in the coal sector. We aggregated to the county level by providing the percent of census tracts within a county that scored over the 75th national percentile for coal employment, meaning that the tract scored higher than 75% of tracts in the country.

Percent of employed people employed in mining, quarrying, and oil & gas extraction

Percent of employed people employed in management, business, and financial occupations

Percent of employed people employed in computer, engineering, and science occupations

Percent of employed people employed in education, legal, arts, and media occupations

Percent of employed people employed in healthcare occupations

Percent of employed people employed in service occupations

Percent of employed people employed in sales and office occupations

Percent of employed people employed in natural resources, construction, and maintenance occupations

Percent of employed people employed in production and transportation occupations

Number of power outage events that occurred for all census tracts in each county from 2017-2020

Average duration of power outage events (in minutes) that occurred for all census tracts in each county from 2017-2020

Total nameplate capacity in MW across all generators and technologies at electric power plants with 1 MW or greater combined capacity

Total nameplate capacity by technology in MW. Possible technologies include: wind, solar PV, batteries, landfill gas, natural gas CC (combined cycle), natural gas CT (combustion turbine), natural gas ST (steam turbine), natural gas ICE (internal combustion engine), petroleum liquids, coal (conventional steam coal), and hydro (conventional hydroelectric).

Percent of nameplate capacity by technology, calculated by dividing a technology's total nameplate capacity (NameplateCapacity_X_MW) by the county's total nameplate capacity (NameplateCapacity_Total_MW).

Texas and New Mexico oil production from January 2022 - December 2022 (in BBL - barrels)

Texas condensate oil production from January 2022 - December 2022 (in BBL - barrels)

Texas casinghead gas production from January 2022 - December 2022 (in MCF - one thousand cubic feet)

Texas gas production from January 2022 - December 2022 (in MCF - one thousand cubic feet)

New Mexico gas production from January 2022 - December 2022 (in MCF - one thousand cubic feet)

Kilometers of electrical power transmission lines by county

Miles of electrical power transmission lines by county

Kilometers of crude oil pipelines by county

Miles of crude oil pipelines by county

Kilometers of petroleum pipelines by county

Miles of petroleum pipelines by county

Kilometers of natural gas pipelines by county

Miles of natural gas pipelines by county

Kilometers of carbon dioxide (CO2) pipelines by county

Miles of carbon dioxide (CO2) pipelines by county

Technical potential for utility-scale solar by county. Note: Technical potential is a theoretical upper bound for generation potential that considers resource and land availability. It does not consider economic or market feasibility, nor does it consider existing systems.

Technical potential for rooftop solar on residential buildings by county. Note: Technical potential is a theoretical upper bound for generation potential that considers resource and rooftop availability. It does not consider economic or market feasibility, nor does it consider existing systems.

Technical potential for rooftop solar on commercial buildings by county. Note: Technical potential is a theoretical upper bound for generation potential that considers resource and rooftop availability. It does not consider economic or market feasibility, nor does it consider existing systems.

Technical potential for utility-scale, onshore wind by county. Note: Technical potential is a theoretical upper bound for generation potential that considers resource and land availability. It does not consider economic or market feasibility, nor does it consider existing systems.

Technical potential for residential and commercial behind-the-meter wind by county. Note: Technical potential is a theoretical upper bound for generation potential that considers resource and land availability. It does not consider economic or market feasibility, nor does it consider existing systems.

Economic potential for geothermal heat pumps (GHPs), also known as ground-source heat pumps, which can provide a renewable source of space conditioning and water heating in buildings. Note: Economic potential is modeled in a conservative, business-as-usual case, which assumes low technology development and conservative customer adoption rates. GHP economic potential represents the sum of the potential GHP applications that result in positive net present value of the investment for each county.

Source	Year
-	-
-	-
-	-
USDA	2021
USDA	2010-2020
USDA	2020-2021
BEA	2021
BEA	2021
BEA	2021
BEA	2021
NLIS	2021
NLIS	2021
CEJST	2023
CEJST	2023
CDC	2020
CDC	2020
CDC	2020
CDC	2020
CDC	2020
CDC	2020
USDA	2020
USDA	2020
USDA	2020
USDA	2020
USDA	2020
USDA	2020
USDA	2020
ACS 5-year estimate - table S1602	2017-2021
USDA	2017-2021
USDA	2017-2021
USDA	2017-2021

USDA	2017-2021
USDA	2017-2021
USDA	2017-2021
USDA	2017-2021
USDA	2017-2021
DOE	2020
USDA	2021
DOEd	2012-2017

DOEd	2012-2017
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DOEd	2012-2017
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DOEd	2012-2017
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DOEd	2012-2017
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University of Wisconsin	2023
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University of Wisconsin	2023
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University of Wisconsin	2023
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University of Wisconsin	2023
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University of Wisconsin	2023
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University of Wisconsin	2023
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EPA	2017
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[EPA](#)

2017

[EPA](#)

2017

[EPA](#)

2018

[EPA](#)

2018

[EPA](#)

2016-2020

[EPA](#)

2022

[EPA](#)

2022

[EPA](#)

2022

[EPA](#) 2022

[EPA](#) 2019

[DOE](#) 2020

[DOE](#) 2015-2020

[DOE](#) 2015-2020

[DOE](#) 2015-2020

[DOE](#) 2015-2020

[ACS 5-year estimate - table S0801](#) 2017-2021

[ACS 5-year estimate - table S2401](#) 2017-2021

[DOE](#) 2015-2020

[DOE](#) 2015-2020

[USDA](#) 2017-2021

ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
ACS 5-year estimate - table S2401	2017-2021
DOE	2017-2020
DOE	2017-2020
Form EIA-860	2022
Form EIA-860	2022
Form EIA-860	2022
Form EIA-860	2022
The Railroad Commission of Texas	2022
New Mexico Oil Conservation District	2022
The Railroad Commission of Texas	2022
The Railroad Commission of Texas	2022
The Railroad Commission of Texas	2022
New Mexico Oil Conservation District	2022
NREL	2020

[NREL](#)

2020

[NREL](#)

2020

[NREL](#)

2020

[NREL](#)

2020

[NREL](#)

2020

Notes

[See this link for more information on FIPS codes](#)