![AzCHER - Arizona Coalition for Healthcare Emergency Response logo]
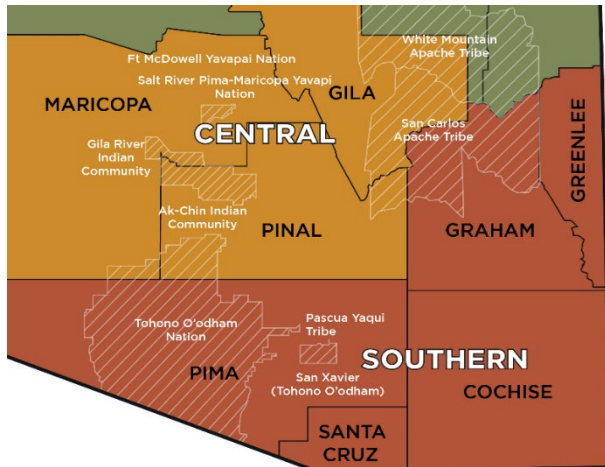
Southern Region Profile
2021-22 Update

Jurisdictions

The Southern Region includes four Tribal nations and five Arizona counties. There are 20 rural and 3 frontier census-recognized primary care areas (PCAs).[1] These PCAs include multiple medically underserved areas and are geographically isolated from healthcare services. Frontier designations represent the most isolated rural areas.

Tribal Nations:[2] Pascua Yaqui, San Carlos Apache, San Xavier, Tohono O'odham

Counties:[2] Pima, Santa Cruz, Cochise, Graham, Greenlee

Rural PCAs:[1] Tanque Verde, Oro Valley, Marana, Picture Rocks, Vail, Tucson West, Flowing Wells, Tucson Estates, Drexel Heights, Valencia West, Green Valley, Sahuarita, Rio Rico, Nogales, Benson, Douglas & Pirtleville, Sierra Vista, Bisbee, Thatcher, Safford

Indian PCAs:[1] Tohono O'odham Nation, Pascua Yaqui Tribe, Ajo, Morenci, Wilcox & Bowie

Frontier PCAs:[1] Ajo, Wilcox & Bowie, Morenci

Population and Vulnerable Demographics

About 1,167,929 people live in the Southern Region.[2] The population varies seasonally with winter visitors staying 30 days or longer, and migrant/agricultural workers coming into the communities during the winter growing season.

During a disaster, individuals with disabilities and others with access and functional needs may require special assistance from the emergency management system. In the Southern region, there are higher proportions of persons living with disabilities (15.3%) and who are Medicare beneficiaries (21.2%) than the state average.[2]

Considerations for those who are very old or very young, live in rural settings, have transportation challenges, have limited English proficiency, have low-socioeconomic status, or face challenges accessing health services should be included as well. 38.4% of the population in the Southern region lives below 200% of the federal poverty level; about one in four children under age 12 also live in poverty.[2] The inmate population is vulnerable due to access to care and congregate living conditions. The Southern Region houses 20.3% of the total prison inmate population of Arizona.

Risk Factors	Southern Region	Arizona
Persons with Disabilities (%)[3]	15.3%	13%
AHCCCS (Medicaid) Population[4]	445,989 (18.9%)	2,355,253

Medicare Beneficiaries (%)[5]	294,067 (21.2%)	1,384,923
Electricity-Dependent Medicare Beneficiaries (%)[5]	12,552 (20.1%)	62,243
Medically Uninsured (%)[2]	9.0%	10.4%
Population below 200% FPL (%)[2]	38.4%	34.5%
Children < age 12 in Poverty (%)[2]	27.4%	24.2%
Correctional Facilities (%)[6]	4 (25%)	16
Correctional Facility Inmate Capacity-prisons only (%)[6]	6,839 (20.3%)	33,657

Healthcare Utilization

The Southern region has 1 primary care providers for every 317 residents, which is less than the Arizona average of 1 primary care physician for every 386 residents.[2] Ambulatory care sensitive conditions - care that if delivered properly would not result in hospitalization – relieves the burden on the hospital system. Our communities have lower proportions of ambulatory care sites per resident over 65 years and higher hospital inpatient days per resident than the rest of the state, indicating higher overall utilization throughout the region.[2]

Utilization	Southern Region	Arizona
Total Primary Care Providers (%)[7]	3,682 (19.5%)	18,878
Total Ambulatory Care Sites (%)[8]	31 (14.6%)	212
ACSs/1000 Residents Age <65[2]	51.8	42.1
Total Emergency Room Visits (%)[9]	413,151 (17.3%)	2,391,489
Total Hospital Beds (%)[10]	3,253 (21%)	15,477
Hospital Inpatient Days/1000 Residents Age <65[2]	599	585
Hospital Beds/1000 Residents[2]	2.5	1.8

Regional Healthcare Infrastructure

All fifteen of the general hospitals in the Southern Region are sole providers of short-stay, acute care, inpatient services within their PCA.[2]

Diverse regional facilities and resources that serve specific populations, including pediatrics, are critical to the whole community response. The Southern Region has 505 specialty beds (all in Pima County), 30 skilled nursing facilities, 3,533 nursing beds, 36 licensed home health agencies, 246 licensed pharmacies, and 32 certified ambulance services.[2]

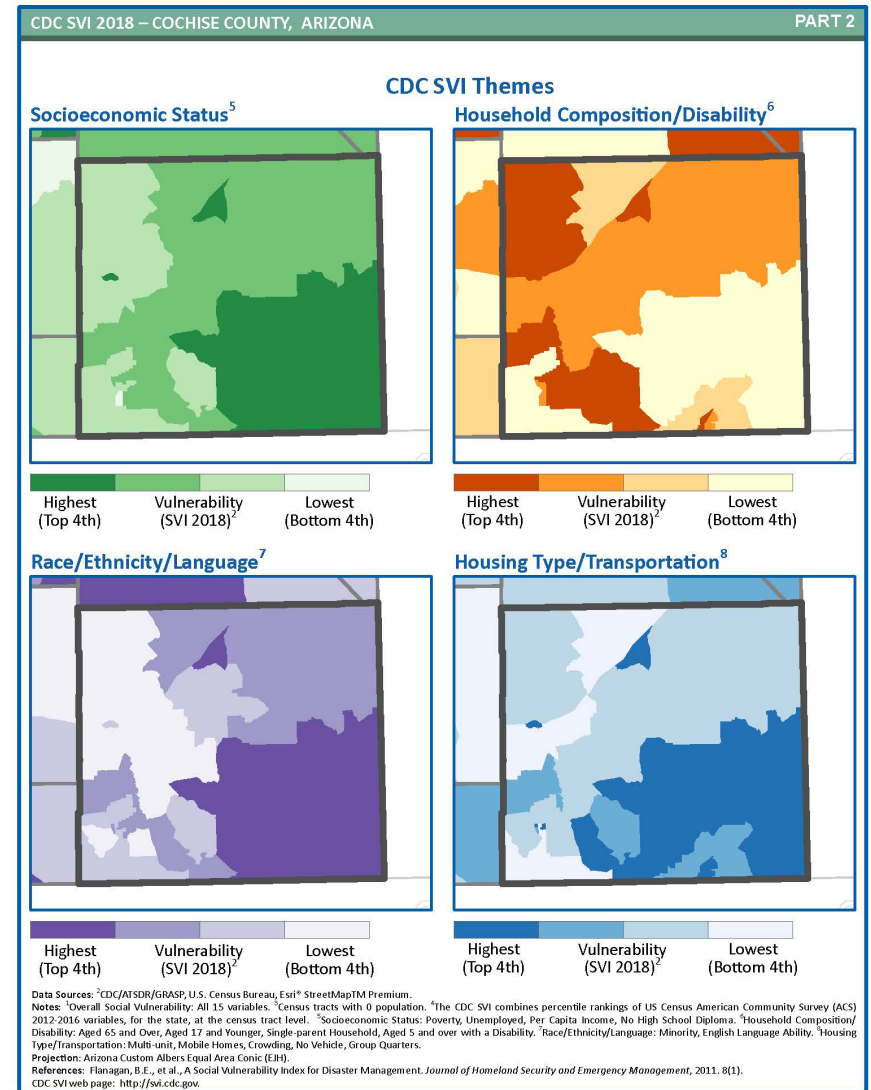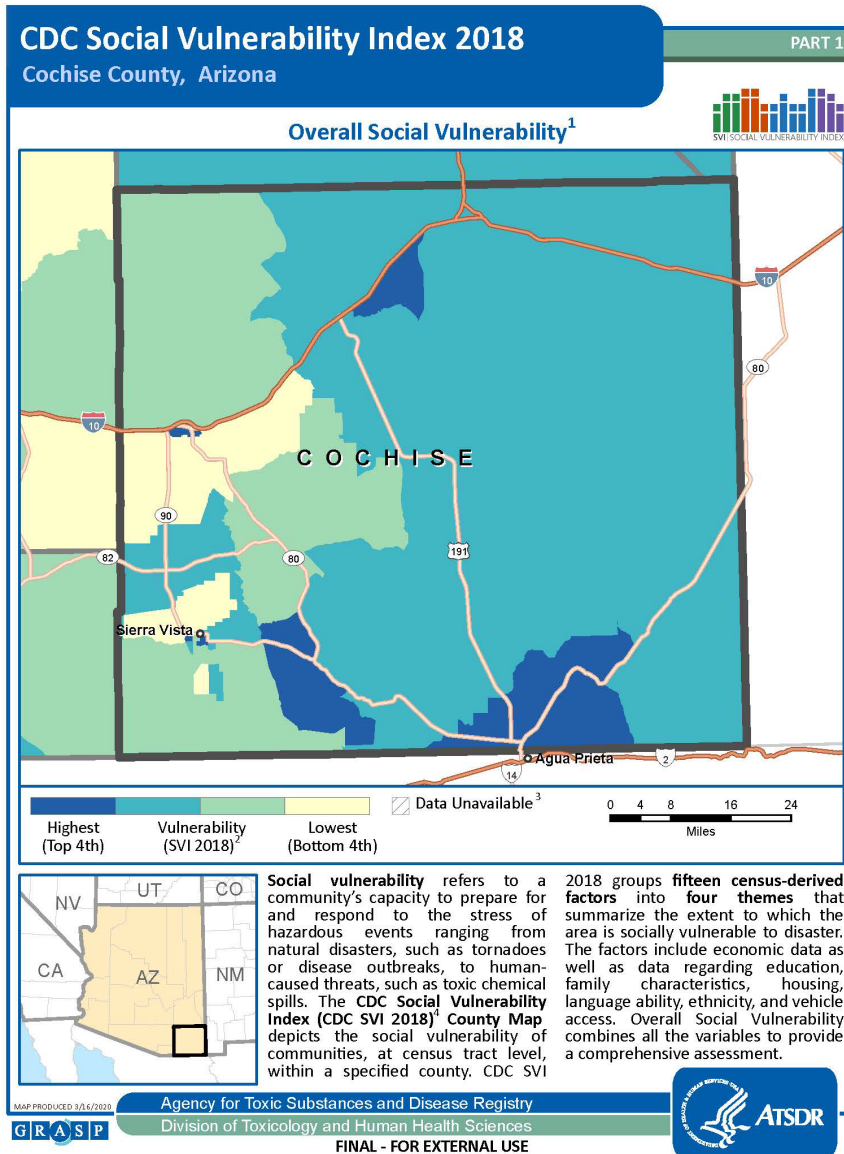| Healthcare Infrastructure	Southern Region	Arizona
General Hospitals[2]	15 (22.7%)	66
Critical Access Hospitals[8]	5 (31.2%)	16
Behavioral Health Hospitals[8]	3 (12.5%)	24
Long-term Care Hospitals[8]	4 (20%)	20
Specialty beds[2]	505 (13.7%)	3,692
ICU bed capacity[10]	299 (18.6%)	1,607
ED bed capacity[10]	500 (21.2%)	2,357
Skilled Nursing Facilities[2]	30 (18.9%)	159
Nursing Beds[2]	3,533 (21.7%)	16,241
Licensed Home Health Agencies[2]	36 (19.1%)	188
Licensed Pharmacies[2]	246 (18.7%)	1,319
Certified Ambulance Services[2]	32 (29.9%)	107
Air Transport[10]	9 (16.4%)	55

County Hazard Identification Summary

County Multi-Jurisdictional Hazard Mitigation Plans are administered once every five years to identify the greatest risk of loss to people and critical facilities. Hazards were identified through a Threats and Hazard Identification Risk Assessment (THIRA). Experiential knowledge of the planning team, considerations of relative risk, historic context, potential for mitigation, alignment with state plans, and duplication of effects for each hazard influenced each County's process.

Southern Region Hazard Lists (Referenced from County Multi-Jurisdictional Hazard Mitigation Plans):

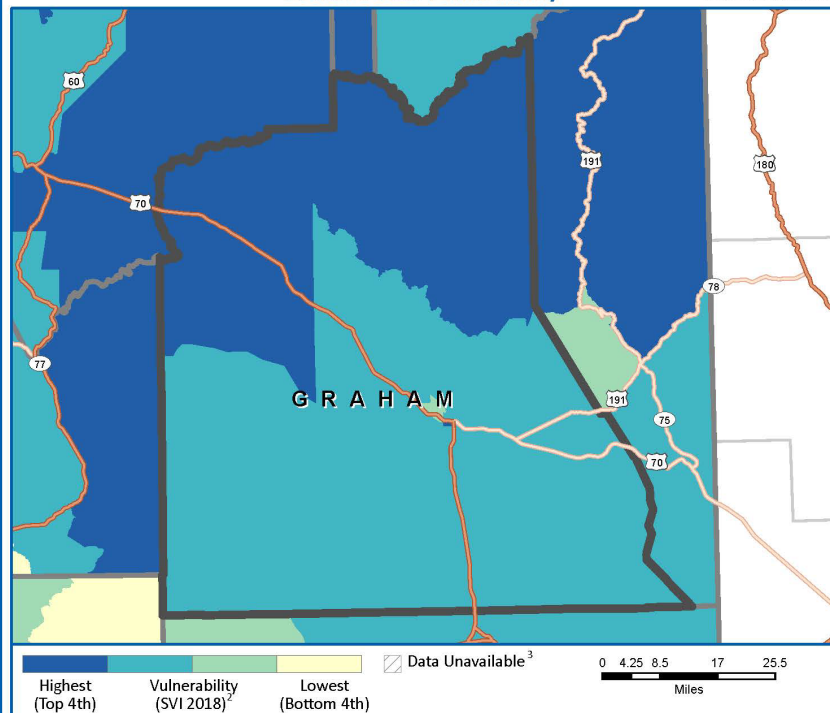| Cochise County (2017)[11]	Graham County (2018)	Greenlee County (2021)[12]	Pima County (2017)[13]	Santa Cruz County (2018)[14]
• Building Collapse/ Mine Subsidence • Drought • Earthquake • Fissure • Flood/Flash Flood • Severe Wind • Wildfire	• Dam Failure • Drought • Fissure • Flood/Flash Flood • Severe Wind • Wildfire	• Drought • Flooding/ Flash Flooding • Levee Failure • Wildfire	• Drought • Earthquake • Extreme Cold • Extreme Heat • Flood • Landslide • Severe Wind • Wildfire	• Dam Failure • Drought • Flooding/Flash Flooding • HazMat Incidents • Wildfire

CDC Social Vulnerability Index (SVI) County Maps[16]

CDC Social Vulnerability Index 2018
Cochise County, Arizona

SVI SOCIAL VULNERABILITY INDEX

Overall Social Vulnerability[1]

C O C H I S E

Sierra Vista

Agua Prieta

| Highest (Top 4th) | Vulnerability (SVI 2018)[2] | Lowest (Bottom 4th) |

⊟ Data Unavailable[3]

0 4 8 16 24 Miles

NV UT CO
CA AZ NM

Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **CDC Social Vulnerability Index (CDC SVI 2018)[4] County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. CDC SVI 2018 groups **fifteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

MAP PRODUCED 3/16/2020

G R A S P

Agency for Toxic Substances and Disease Registry
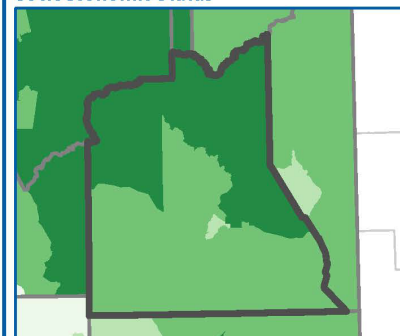Division of Toxicology and Human Health Sciences
FINAL - FOR EXTERNAL USE

ATSDR

CDC SVI Themes
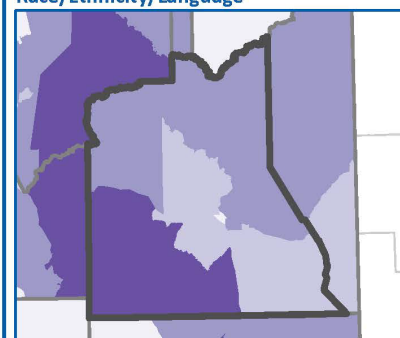
Socioeconomic Status[5]

| Highest (Top 4th) | Vulnerability (SVI 2018)[2] | Lowest (Bottom 4th) |

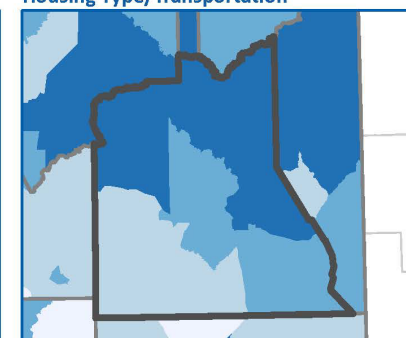#### Household Composition/Disability[6]

| Highest (Top 4th) | Vulnerability (SVI 2018)[2] | Lowest (Bottom 4th) |

Race/Ethnicity/Language[7]

| Highest (Top 4th) | Vulnerability (SVI 2018)[2] | Lowest (Bottom 4th) |

Housing Type/Transportation[8]

| Highest (Top 4th) | Vulnerability (SVI 2018)[2] | Lowest (Bottom 4th) |

Data Sources: [2]CDC/ATSDR/GRASP, U.S. Census Bureau, Esri® StreetMapTM Premium.
Notes: [1]Overall Social Vulnerability: All 15 variables. [3]Census tracts with 0 population. [4]The CDC SVI combines percentile rankings of US Census American Community Survey (ACS) 2012-2016 variables, for the state, at the census tract level. [5]Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. [6]Household Composition/Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. [7]Race/Ethnicity/Language: Minority, English Language Ability. [8]Housing Type/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.
Projection: Arizona Custom Albers Equal Area Conic (EJH).
References: Flanagan, B.E., et al., A Social Vulnerability Index for Disaster Management. *Journal of Homeland Security and Emergency Management*, 2011. 8(1).
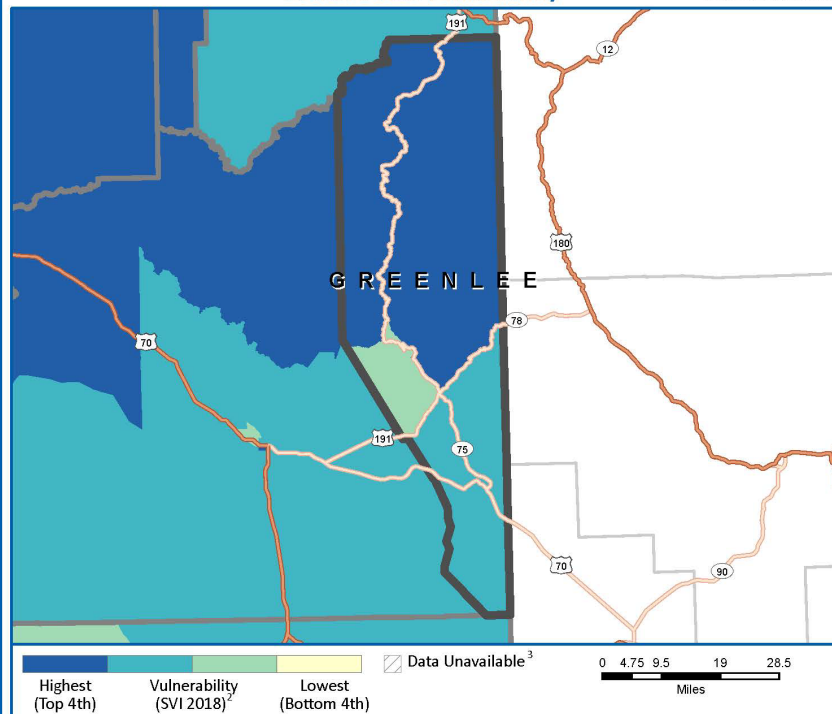CDC SVI web page: http://svi.cdc.gov.

FINAL - FOR EXTERNAL USE

CDC Social Vulnerability Index 2018
Graham County, Arizona

Overall Social Vulnerability[1]

Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

☒ Data Unavailable[3]

0   4.25 8.5   17   25.5
Miles

Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **CDC Social Vulnerability Index (CDC SVI 2018)[4] County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. CDC SVI 2018 groups **fifteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

MAP PRODUCED 3/16/2020

GRASP

Agency for Toxic Substances and Disease Registry
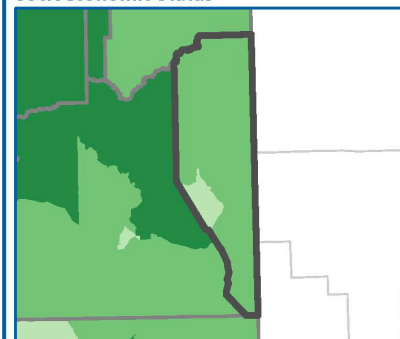Division of Toxicology and Human Health Sciences
FINAL - FOR EXTERNAL USE

ATSDR

CDC SVI Themes

Socioeconomic Status[5]

Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Household Composition/Disability[6]

Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Race/Ethnicity/Language[7]

Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

Housing Type/Transportation[8]

Highest (Top 4th) — Vulnerability (SVI 2018)[2] — Lowest (Bottom 4th)

FINAL - FOR EXTERNAL USE

CDC Social Vulnerability Index 2018
Greenlee County, Arizona

Overall Social Vulnerability[1]

Highest
(Top 4th) Vulnerability
(SVI 2018)[2] Lowest
(Bottom 4th)

☐ Data Unavailable [3]

0 4.75 9.5 19 28.5
Miles

Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills. The **CDC Social Vulnerability Index (CDC SVI 2018)[4] County Map** depicts the social vulnerability of communities, at census tract level, within a specified county. CDC SVI 2018 groups **fifteen census-derived factors** into **four themes** that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability combines all the variables to provide a comprehensive assessment.

MAP PRODUCED 3/16/2020

GRASP

Agency for Toxic Substances and Disease Registry
Division of Toxicology and Human Health Sciences
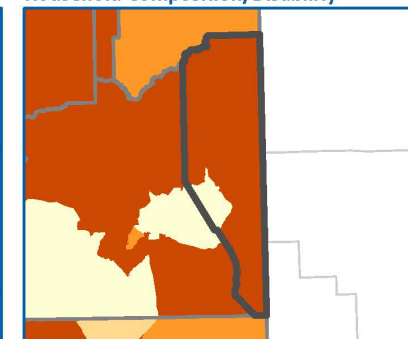FINAL - FOR EXTERNAL USE

CDC SVI Themes

Socioeconomic Status[5]

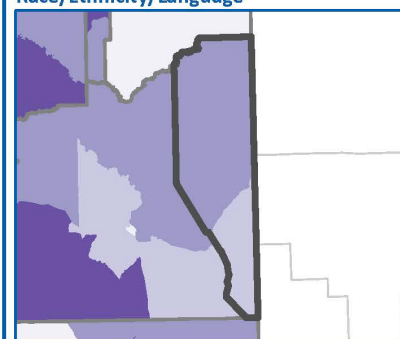

Highest
(Top 4th) Vulnerability
(SVI 2018)[2] Lowest
(Bottom 4th)

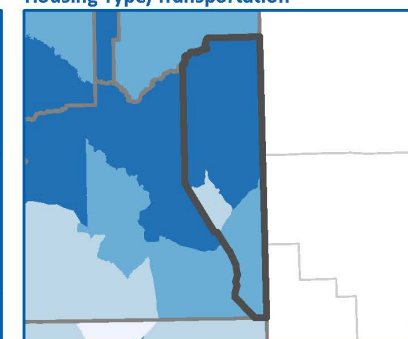### Household Composition/Disability[6]

Highest
(Top 4th) Vulnerability
(SVI 2018)[2] Lowest
(Bottom 4th)

Race/Ethnicity/Language[7]

Highest
(Top 4th) Vulnerability
(SVI 2018)[2] Lowest
(Bottom 4th)

Housing Type/Transportation[8]

Highest
(Top 4th) Vulnerability
(SVI 2018)[2] Lowest
(Bottom 4th)

Resources

Resources

1. Arizona Department of Health Services. Frontier Special Area: 2020 Statistical Profile. https://www.azdhs.gov/documents/prevention/health-systems-development/data-reports-maps/reports/frontier.pdf. Published 2021. Accessed February 10, 2022.
2. Arizona Department of Health Services. Statistical Profiles - Primary Care Area Statistical Profiles. https://www.azdhs.gov/prevention/health-systems-development/data-reports-maps/index.php#statistical-profiles-pca. Published February 1, 2021. Accessed February 10, 2022.
3. Arizona Developmental Disabilities Planning Council. Disability data for Arizona. https://addpc.az.gov/disability-data-arizona. Published 2020. Accessed February 10, 2022.
4. Arizona Health Care and Cost Containment System Population Statistics. https://www.azahcccs.gov/Resources/Downloads/PopulationStatistics/2022/Feb/PopulationbyCounty_2.01.2022.pdf. Published February 2022. Accessed February 10, 2022.
5. U.S. Department of Health and Human Services. HHS EmPOWER Map 3.0. HHS.gov. https://empowermap.hhs.gov/. Published November 4, 2021. Accessed February 10, 2022.
6. Arizona Department of Corrections, Rehabilitation, and Reentry. ADCCR Dashboard. https://corrections.az.gov/adcrr-covid-19-dashboard. Published February 10, 2022. Accessed February 10, 2022.
7. Koch B, Coates S, Campos-Outcalt D, Carter H, and Derksen D. Arizona Primary Care Physician Workforce Report. https://uahs.arizona.edu/sites/default/files/2019_az_primary_care_physician_workforce_report.pdf. Published 2019. Accessed February 10, 2022.
8. Arizona Department of Health Services. Public Health Licensing - Provider & Facility Databases. https://azdhs.gov/licensing/index.php#databases. Published February 3, 2022. Accessed February 10, 2022.
9. Arizona Department of Health Services. Population Health and Vital Statistics: Hospital Inpatient Discharges & Emergency Room Visits Statistics. https://pub.azdhs.gov/health-stats/hip/index.php?pg=diagnosis. Published 2019. Accessed February 10, 2022.
10. Arizona EMResource. Updated February 10, 2022. Accessed February 10, 2022.
11. Cochise County Emergency Services Department. Multi-Jurisdictional Local Hazard Mitigation Plan. https://www.cochise.az.gov/DocumentCenter/View/495/Cochise-County-Multi-Jurisdictional-Hazard-Mitigation-Plan-2017-PDF. Published August 2017. Accessed February 14, 2022.
12. Greenlee County Department of Emergency Management. Greenlee County Multi-Jurisdictional Hazard Mitigation Plan. https://www.co.greenlee.az.us/pdf/Greenlee%20County%20MJMHMP%202021_MainBody_FinalDraft_v1.pdf. Published August 2021. Accessed February 14, 2022.
13. Pima County. Pima County Multi-Jurisdictional Hazard Mitigation Plan. https://webcms.pima.gov/UserFiles/Servers/Server_6/File/Government/OEMHS/2017%20Pima%20Co%20Plan%20Final%20with%20Adoption%201-2018.pdf. Published 2018. Accessed February 14, 2022.
14. Santa Cruz County. Santa Cruz County Multi-Jurisdictional Hazard Mitigation Plan. https://www.santacruzcountyaz.gov/DocumentCenter/View/9430/SantaCruz-County-Multi-Juris-Haz-Mit-Plan_2018_FinalDraft__v2-with-redactions-for-website. Published 2018. Accessed February 14, 2022.
15. AzCHER Southern Region Community Hazard Vulnerability Assessment. Updated December 2020.
16. Centers for Disease Control and Prevention. Social Vulnerability Index Prepared County Maps. CDC.gov. https://svi.cdc.gov/prepared-county-maps.html. Published 2018. Accessed February 10, 2022.

Glossary

ACS	Ambulatory Care Site
AHCCCS	Arizona Health Care Cost Containment System
CDC	Centers for Disease Control and Prevention
HHS emPOWER map	Over 2.5 million Medicare beneficiaries rely on electricity-dependent medical equipment, such as ventilators, to live independently in their homes. Severe weather and other emergencies, especially those with long power outages, can be life-threatening for these individuals. The HHS emPOWER Map is updated monthly and displays the total number of at-risk electricity-dependent Medicare beneficiaries in a geographic area, down to the ZIP Code. The HHS emPOWER Map gives every public health official, emergency manager, hospital, first responder, electric company, and community member the power to discover the electricity-dependent Medicare population in their state, territory, county, and ZIP Code. When combined with real-time severe weather and hazard maps, communities can easily anticipate and plan for the needs of this population during an emergency.
FPL	Federal Poverty Level
PCA	Primary Care Area: A Primary Care Area is a geographic area in which most residents seek primary health services from the same place(s). The PCA is meant to depict the "primary care service seeking patterns" of the residents.
Specialty Beds	The number of hospital beds located at "Specialty" hospitals, such as emergency or surgical hospitals
SVI	Social Vulnerability Index 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. CDC Social Vulnerability Index (CDC SVI) uses 15 U.S. census variables to help local officials identify communities that may need support before, during, or after disasters.