

Northern Region Profile

2021-22 Update



Jurisdictions

The Northern Region includes 6 Tribal nations and four Arizona counties.¹ There are 8 rural and 4 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 Hopi Tribe, Kaibab-Paiute, Navajo Nation, White Mountain Apache Tribe, Yavapai Prescott Tribe and the Yavapai Apache Nation

Counties:² Apache, Coconino, Navajo, Yavapai

Rural PCAs:¹ Black Canyon City, Cottonwood\Sedona, Chino Valley, Prescott Valley, Winslow, Snowflake/Heber, Show Low, Flagstaff

Frontier PCAs:¹ Grand Canyon Village, Page, Springerville/Eager, Williamson

Population and Vulnerable Demographics

About 562,672 people live in the Northern Region.² The Northern Region is geographically the largest region in Arizona and has a wide range of climate zones which makes it possible to have heat and cold related illnesses on the same day.

During a disaster, individuals with disabilities and others with access and functional needs may require special assistance from the emergency management system. In the Northern region, there are higher proportions of persons living with disabilities (15.9%) and who are Medicare beneficiaries (10.2%) 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. 45.8% of the population in the Northern region lives below 200% of the federal poverty level; about one in three children under age 12 also live in poverty.² The inmate population is vulnerable due to access to care and congregate living conditions. The Northern Region houses 3.4% of the total prison inmate population of Arizona.⁶

Risk Factors	Northern Region	Arizona
Persons with Disabilities (%) ³	15.9%	13%
AHCCCS (Medicaid) Population ⁴	209,659 (8.9%)	2,355,253
Medicare Beneficiaries (%) ⁵	1417,137 (10.2%)	1,384,923

Electricity-Dependent Medicare Beneficiaries (%) ⁵	11,488 (18.5%)	62,243
Medically Uninsured (%) ²	14.8%	10.4%
Population below 200% FPL (%) ²	45.8%	34.5%
Children < age 12 in Poverty (%) ²	32%	24.2%
Correctional Facilities (%) ⁶	1 (6.2%)	16
Correctional Facility Inmate Capacity-prisons only (%) ⁶	1,142 (3.4%)	33,657

Healthcare Utilization

The Northern region has one provider for every 751 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 lower hospital inpatient days per resident than the rest of the state.²

Utilization	Northern Region	Arizona
Total Primary Care Providers (%) ⁷	1,136 (6%)	18,878
Total Ambulatory Care Sites (%) ⁸	10 (4.7%)	212
ACs/1000 Residents Age <65 ²	40.6	42.1
Total Emergency Room Visits (%) ⁹	183,327 (7.7%)	2,391,489
Total Hospital Beds (%) ¹⁰	1,162 (7.5%)	15,477
Hospital Inpatient Days/1000 Residents Age <65 ²	516	585
Hospital Beds/1000 Residents ²	1.3	1.8

Regional Healthcare Infrastructure

All the general hospitals in the Northern Region are sole providers of short-stay, acute care, inpatient services within their PCA.

Diverse regional facilities and resources that serve specific populations, including pediatrics, are critical to the whole community response. The Northern Region has 156 specialty beds, 15 skilled nursing facilities, 1,154 nursing beds, 13 licensed home health agencies, 89 licensed pharmacies, and 24 certified ambulance services.²

Healthcare Infrastructure	Northern Region	Arizona
General Hospitals ²	9 (13.6%)	66
Critical Access Hospitals ⁸	5 (31.2%)	16

Behavioral Health Hospitals ⁸	4 (16.7%)	24
Long-term Care Hospitals ⁸	2 (10%)	20
Specialty beds ²	156 (4.2%)	3,692
ICU bed capacity ¹⁰	116 (7.2%)	1,607
ED bed capacity ¹⁰	167 (7%)	2,357
Skilled Nursing Facilities ²	15 (9.4%)	159
Nursing Beds ²	1,154 (7.1%)	16,241
Licensed Home Health Agencies ²	13 (6.9%)	188
Licensed Pharmacies ²	89 (6.7%)	1,319
Certified Ambulance Services ²	24 (22.4%)	107
Air Transport ¹⁰	16 (29.1%)	55

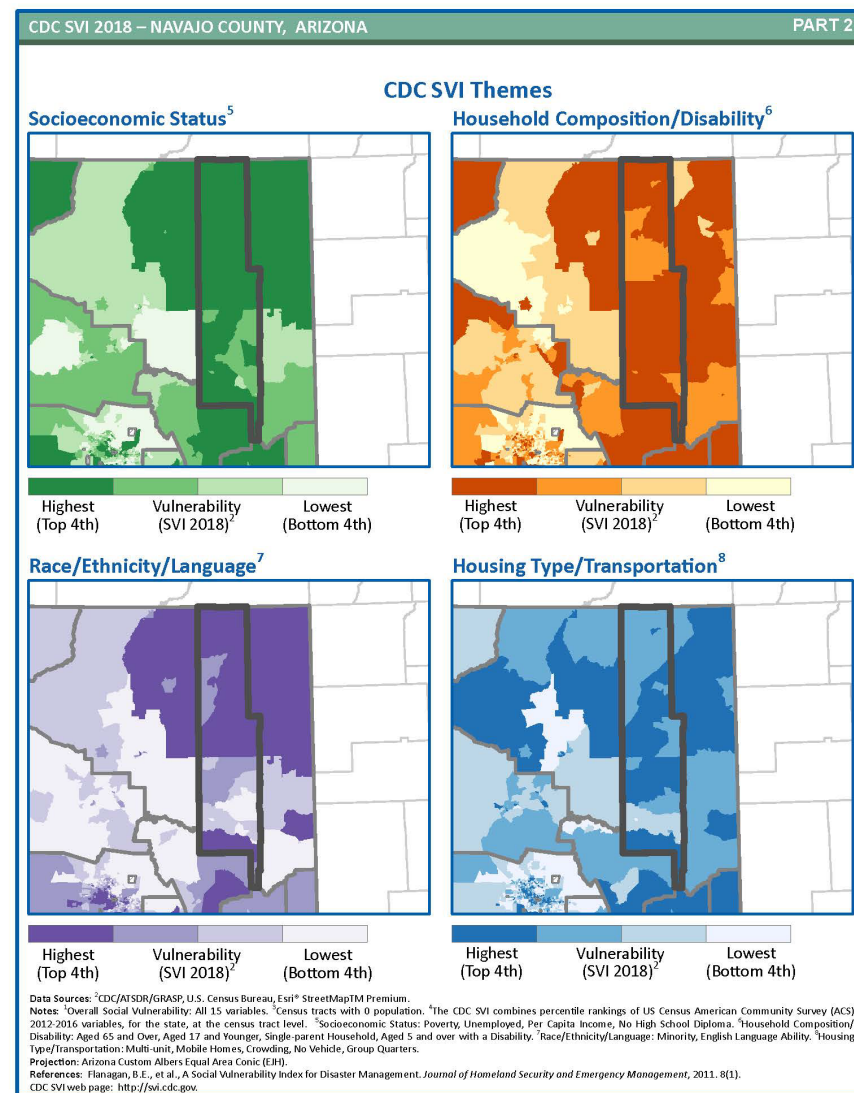
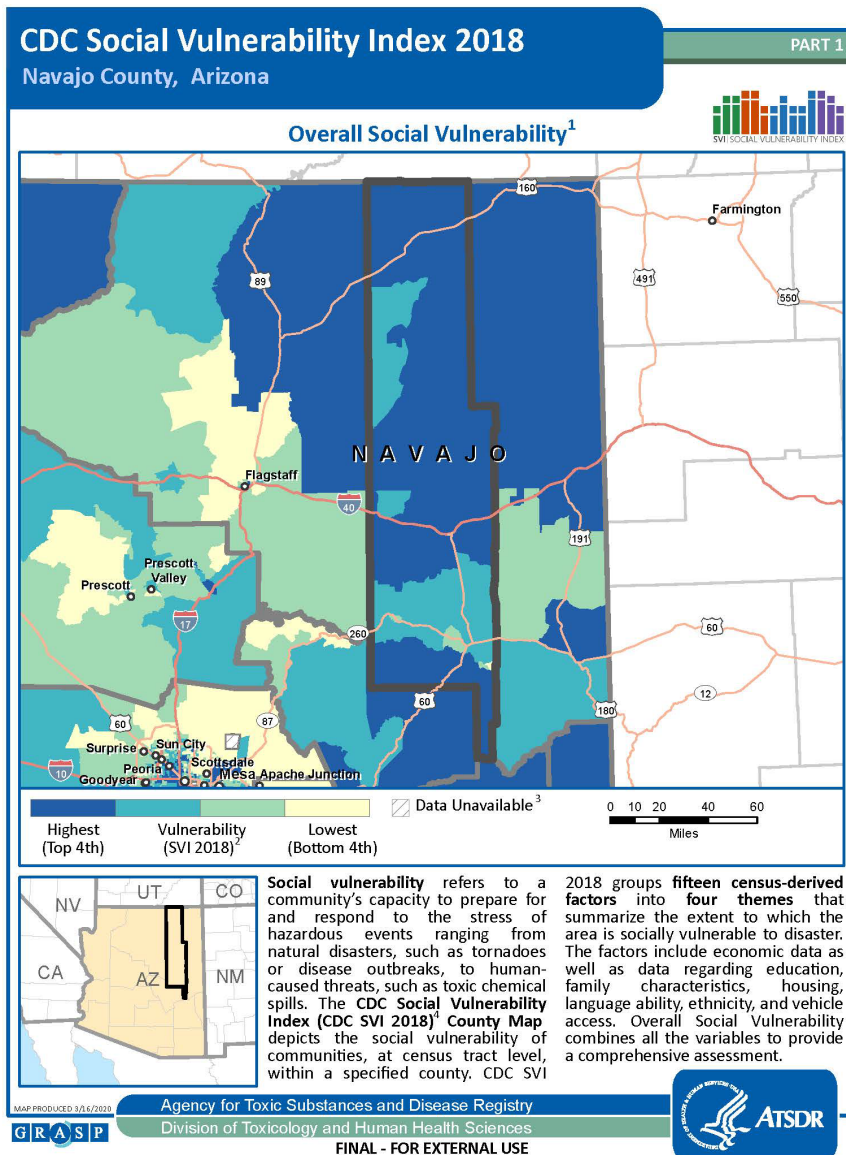
County Hazard Identification Summary

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.

Northern Region Hazard Lists (Referenced from County Multi-Jurisdictional Hazard Mitigation Plans and 2019 AzCHER CHVA):

Apache (2017) ¹⁴	Coconino (2021) ¹²	Navajo (2017) ¹³	Yavapai (2018) ¹¹
<ul style="list-style-type: none"> • Flood/Flash Flood • Severe Wind • Wildfire • Winter Storm 	<ul style="list-style-type: none"> • Wildland Fire • Flood/Flash Flood and Post Wildfire Flood/ Debris Flows • Drought • Public Health Outbreak/ Pandemic • Excessive Heat • Hazardous Materials/ Pipeline Failure/ Transport Accident • Dam Failure • Earthquake and Seismic Hazards • High Winds/ Tornado 	<ul style="list-style-type: none"> • Dam Failure • Drought • Flood/Flash Flood • Hazardous Materials Incidents • Levee Failure • Severe Wind • Wildfire • Winter Storm 	<ul style="list-style-type: none"> • Earthquake • Flood • Landslide/ Mudslide • Severe Wind • Wildfires • Winter Storm

CDC Social Vulnerability Index (SVI) County Maps¹⁶



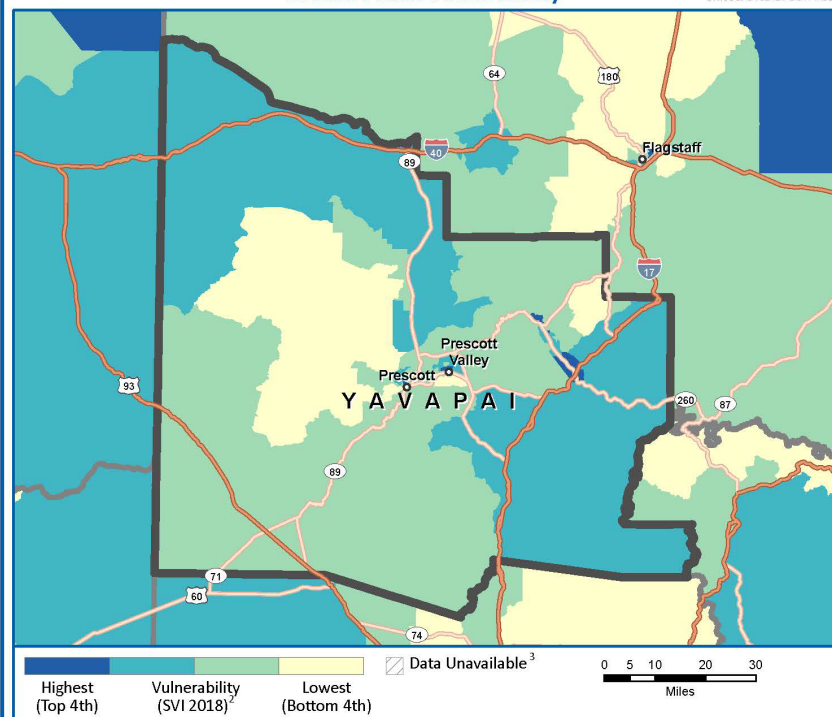
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CDC Social Vulnerability Index 2018

Yavapai County, Arizona

PART 1

Overall Social Vulnerability¹



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)**¹ 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 3/14/2019

Agency for Toxic Substances and Disease Registry

Division of Toxicology and Human Health Sciences

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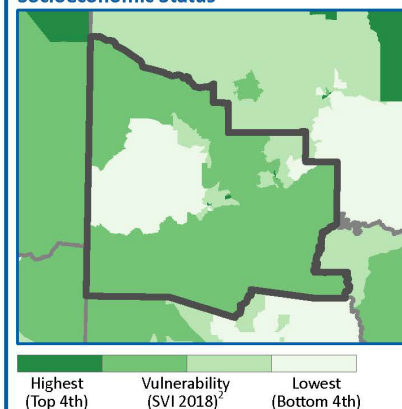


CDC SVI 2018 – YAVAPAI COUNTY, ARIZONA

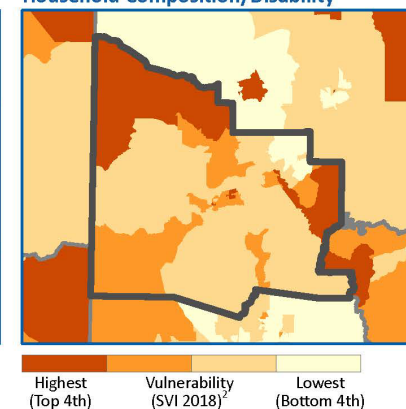
PART 2

CDC SVI Themes

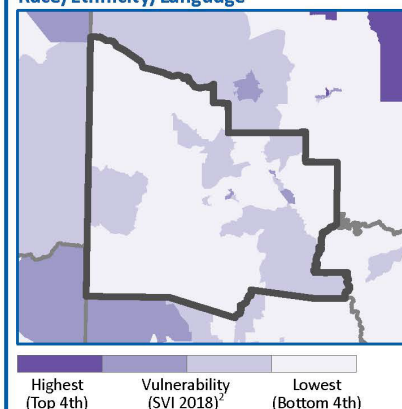
Socioeconomic Status⁵



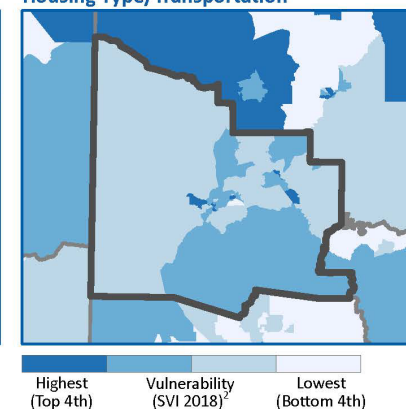
Household Composition/Disability⁶



Race/Ethnicity/Language⁷



Housing Type/Transportation⁸



Data Sources: ¹CDC/ATSDR/GRASP, U.S. Census Bureau, Esri® StreetMap™ Premium.

Notes: ²Overall Social Vulnerability: All 15 variables. ³Census tracts with 0 population. ⁴The CDC SVI combines percentile rankings of US Census American Community Survey (ACS) 2012-2016 variables, for the state, at the census tract level. ⁵Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. ⁶Household Composition/Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. ⁷Race/Ethnicity/Language: Minority, English Language Ability. ⁸Housing Type/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.

Projection: Arizona Custom Albers Equal Area Conic (Eh).

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>.

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Resources

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Glossary

ACS	Ambulatory Care Site
AHCCCS	Arizona Health Care Cost Containment System
CDC	Centers for Disease Control and Prevention
HHS emPOWER map	<p>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.</p> <p>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.</p> <p>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.</p>
FPL	Federal Poverty Level
PCA	<p>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.</p>
Specialty Beds	The number of hospital beds located at "Specialty" hospitals, such as emergency or surgical hospitals
SVI	<p>Social Vulnerability Index</p> <p>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.</p> <p>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.</p>