

## Western Region Vulnerability Profile

2021-22 Update



### Jurisdictions

The Western Region includes 6 Tribal Nations and 3 Arizona counties. There are 9 rural and 2 frontier census-recognized primary care areas (PCAs).<sup>1</sup> These PCAs include multiple medically underserved areas and are geographically isolated from healthcare services. Frontier designations represent the most isolated rural areas.

**Tribal Nations:**<sup>1</sup> Hualapai Tribe, Kaibab-Paiute Tribe, Fort Mojave Indian Tribe, Colorado River Indian Tribe, Fort Yuma Quechan Tribe, Cocopah Tribe

**Counties:**<sup>1</sup> Mohave, La Paz, Yuma

**Rural PCAs:**<sup>1</sup> Bullhead City, Fortuna Foothills, Golden Valley, Parker, Kingman, Lake Havasu City, San Luis, Somerton, Yuma

**Frontier PCAs:**<sup>1</sup> Colorado City, Quartzsite

### Population and Vulnerable Demographics

The population in the western region is approximately 477,446.<sup>2</sup> 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 Western region, there are higher proportions of persons living with disabilities (16.9%) and who are Medicare beneficiaries (8.2%) than the state average.<sup>2</sup>

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. 42.7% of the population lives below 200% of the federal poverty level; about 1 in 3 children under age 12 also live in poverty.<sup>2</sup> The inmate population is vulnerable due to access to care and congregate living conditions. The Western Region houses 17.3% of the total prison inmate population of Arizona.<sup>6</sup>

Risk Factors	Western Region	Arizona
Persons with Disabilities (%) <sup>3</sup>	16.9%	13%
AHCCCS (Medicaid) Population <sup>4</sup>	189,174 (8%)	2,355,253
Medicare Beneficiaries (%) <sup>5</sup>	113,759 (8.2%)	1,384,923
Electricity-Dependent Medicare Beneficiaries (%) <sup>5</sup>	5,302 (8.5%)	62,243
Medically Uninsured (%) <sup>2</sup>	12.1%	10.4%

Population below 200% FPL (%) <sup>2</sup>	42.7%	34.5%
Children < age 12 in Poverty (%) <sup>2</sup>	32.3%	24.2%
Correctional Facilities (%) <sup>6</sup>	2 (12.5%)	16
Correctional Facility Inmate Capacity-prisons only (%) <sup>6</sup>	5,827 (17.3%)	33,657

## Healthcare Utilization

The Western region has one provider for every 865 residents.<sup>2</sup> Ambulatory care sensitive conditions - care that if delivered properly would not result in hospitalization - relieves the burden on the hospital system. The Western Region communities have higher proportions of ambulatory care sites per resident over 65 years, yet higher hospital inpatient days per resident than the rest of the state.<sup>2</sup>

Utilization	Western Region	Arizona
Total Primary Care Providers (%) <sup>7</sup>	801 (4.2%)	18,878
Total Ambulatory Care Sites (%) <sup>8</sup>	8 (4.2%)	212
ACSS/1000 Residents Age <65 <sup>2</sup>	51.9	42.1
Total Emergency Room Visits (%) <sup>9</sup>	175,368 (7.3%)	2,391,489
Total Hospital Beds (%) <sup>10</sup>	865 (5.5%)	15,477
Hospital Inpatient Days/1000 Residents Age <65 <sup>2</sup>	553	585
Hospital Beds/1000 Residents <sup>2</sup>	1.5	1.8

## Regional Healthcare Infrastructure

All six of the general hospitals in the Western Region are sole providers of short-stay, acute care, inpatient services within their PCA.<sup>2</sup>

Diverse regional facilities and resources that serve specific populations, including pediatrics, are critical to the whole community response. The Western Region has 93 specialty beds, 11 skilled nursing facilities, 1,200 nursing beds, 15 licensed home health agencies, 76 licensed pharmacies, and 15 certified ambulance services.<sup>2</sup>

Healthcare Infrastructure	Western Region	Arizona
General Hospitals <sup>2</sup>	6 (9%)	66
Critical Access Hospitals <sup>8</sup>	2 (12.5%)	16
Behavioral Health Hospitals <sup>8</sup>	1 (4.2%)	24
Long-term Care Hospitals <sup>8</sup>	2 (10%)	20
Specialty beds <sup>2</sup>	93 (2.5%)	3,692

ICU bed capacity <sup>10</sup>	107 (6.7%)	1,607
ED bed capacity <sup>10</sup>	208 (8.8%)	2,357
Skilled Nursing Facilities <sup>2</sup>	11 (6.9%)	159
Nursing Beds <sup>2</sup>	1,200 (7.4%)	16,241
Licensed Home Health Agencies <sup>2</sup>	15 (8%)	188
Licensed Pharmacies <sup>2</sup>	76 (5.8%)	1,319
Certified Ambulance Services <sup>2</sup>	15 (14%)	107
Air Transport Services <sup>10</sup>	13 (2.4%)	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.

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

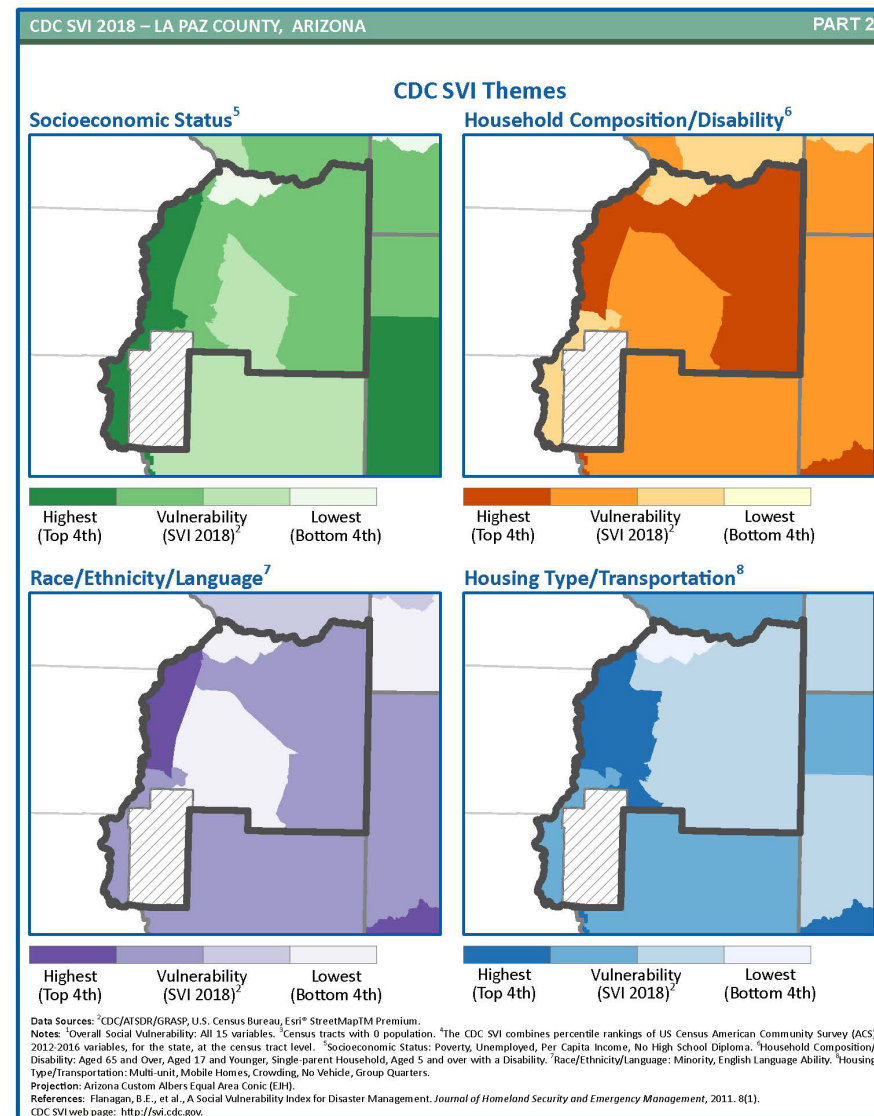
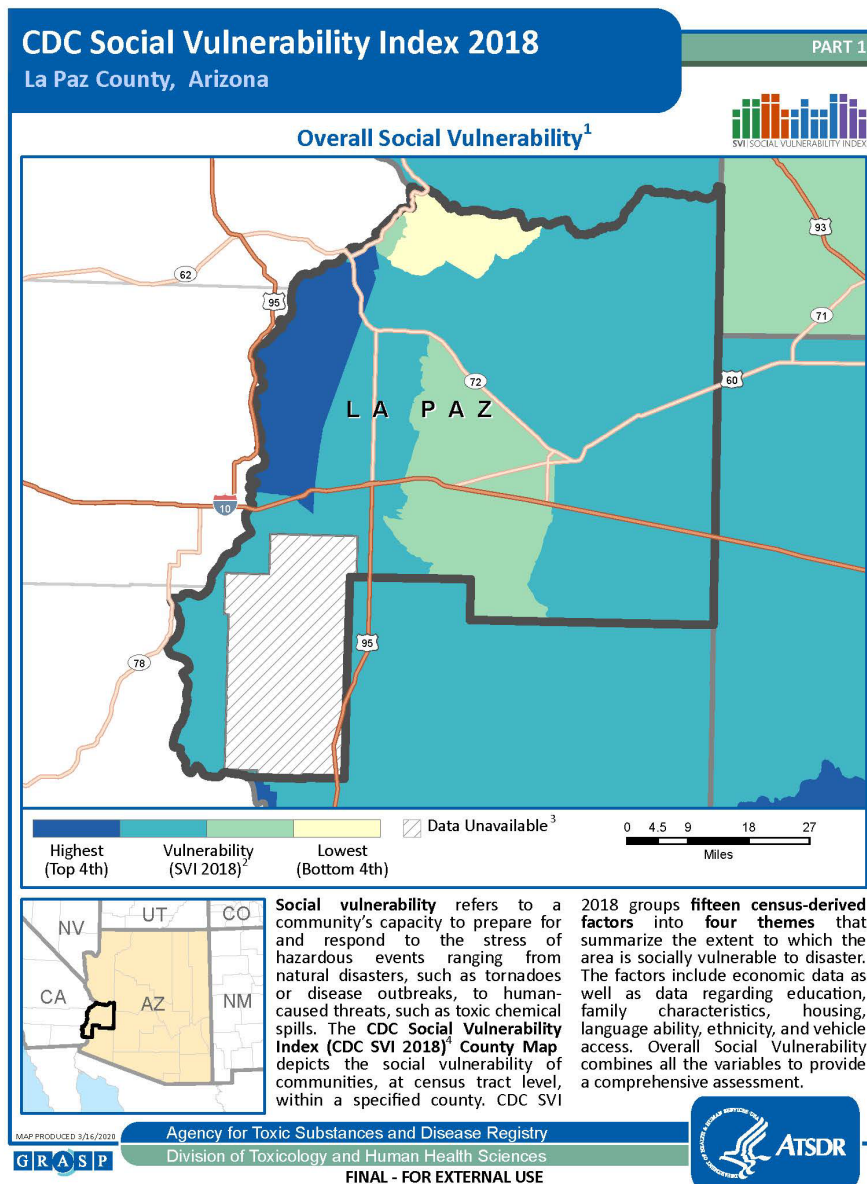
La Paz County (2020) <sup>11</sup>	Mohave County (2021) <sup>12</sup>	Yuma County (2019) <sup>13</sup>
<ul style="list-style-type: none"> <li>• Dam Failure</li> <li>• Drought</li> <li>• Flooding/Flash Flooding</li> <li>• Hazardous Materials Incident</li> <li>• Severe Wind</li> <li>• Wildfire</li> </ul>	<ul style="list-style-type: none"> <li>• Biological</li> <li>• Dam Failure</li> <li>• Drought</li> <li>• Extreme Heat</li> <li>• Flooding</li> <li>• Hazardous Material Incident</li> <li>• Power/Utility Outage</li> <li>• Severe Wind</li> <li>• Wildfire</li> <li>• Earthquake</li> </ul>	<ul style="list-style-type: none"> <li>• Drought</li> <li>• Earthquake</li> <li>• Extreme Heat (Power Outage)</li> <li>• Flooding</li> <li>• Severe Wind/Dust Storms</li> <li>• Wildfire</li> </ul>

## Regional Considerations

-Hoover Dam (Mohave County)

-Military Base (Yuma County)

# CDC Social Vulnerability Index (SVI) County Maps



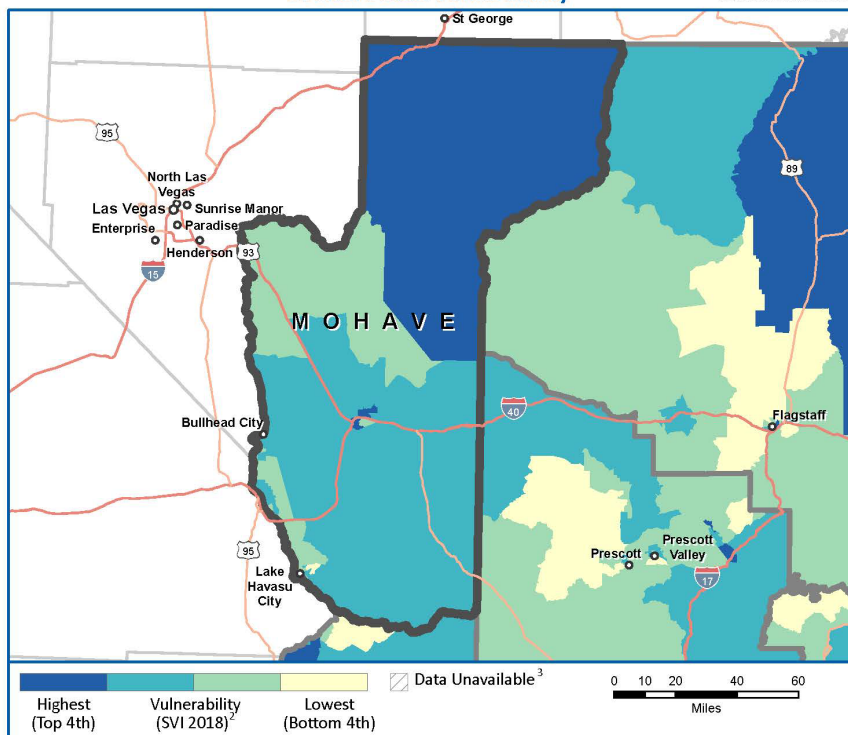
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# CDC Social Vulnerability Index 2018

Mohave County, Arizona

PART 1

## Overall Social Vulnerability<sup>1</sup>



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)<sup>3</sup> 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 3/16/2021

Agency for Toxic Substances and Disease Registry

Division of Toxicology and Human Health Sciences

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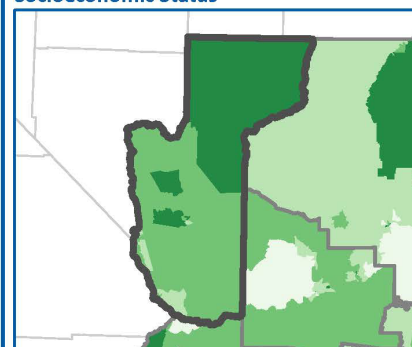


CDC SVI 2018 – MOHAVE COUNTY, ARIZONA

PART 2

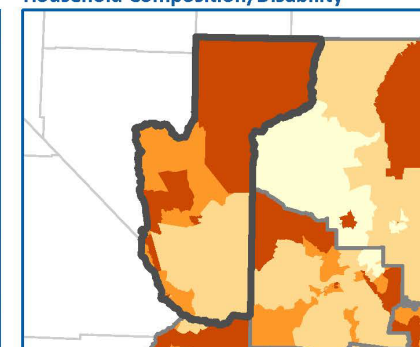
## CDC SVI Themes

### Socioeconomic Status<sup>5</sup>



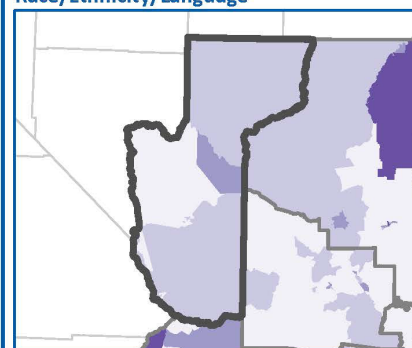
Legend: Highest (Top 4th), Vulnerability (SVI 2018)<sup>2</sup>, Lowest (Bottom 4th)

### Household Composition/Disability<sup>6</sup>



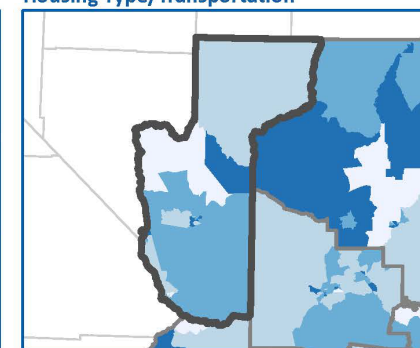
Legend: Highest (Top 4th), Vulnerability (SVI 2018)<sup>2</sup>, Lowest (Bottom 4th)

### Race/Ethnicity/Language<sup>7</sup>



Legend: Highest (Top 4th), Vulnerability (SVI 2018)<sup>2</sup>, Lowest (Bottom 4th)

### Housing Type/Transportation<sup>8</sup>



Legend: Highest (Top 4th), Vulnerability (SVI 2018)<sup>2</sup>, Lowest (Bottom 4th)

Data Sources: <sup>1</sup>CDC/ATSDR/GRASP, U.S. Census Bureau, Esri<sup>®</sup> StreetMap™ Premium.  
 Notes: <sup>2</sup>Overall Social Vulnerability: All 15 variables. <sup>3</sup>Census tracts with 0 population. <sup>4</sup>The CDC SVI combines percentile rankings of US Census American Community Survey (ACS) 2012-2016 variables, for the state, at the census tract level. <sup>5</sup>Socioeconomic Status: Poverty, Unemployed, Per Capita Income, No High School Diploma. <sup>6</sup>Household Composition/Disability: Aged 65 and Over, Aged 17 and Younger, Single-parent Household, Aged 5 and over with a Disability. <sup>7</sup>Race/Ethnicity/Language: Minority, English Language Ability. <sup>8</sup>Housing Type/Transportation: Multi-unit, Mobile Homes, Crowding, No Vehicle, Group Quarters.  
 Projection: Arizona Custom Albers Equal Area Conic (EHL).  
 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>.

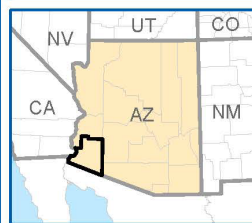
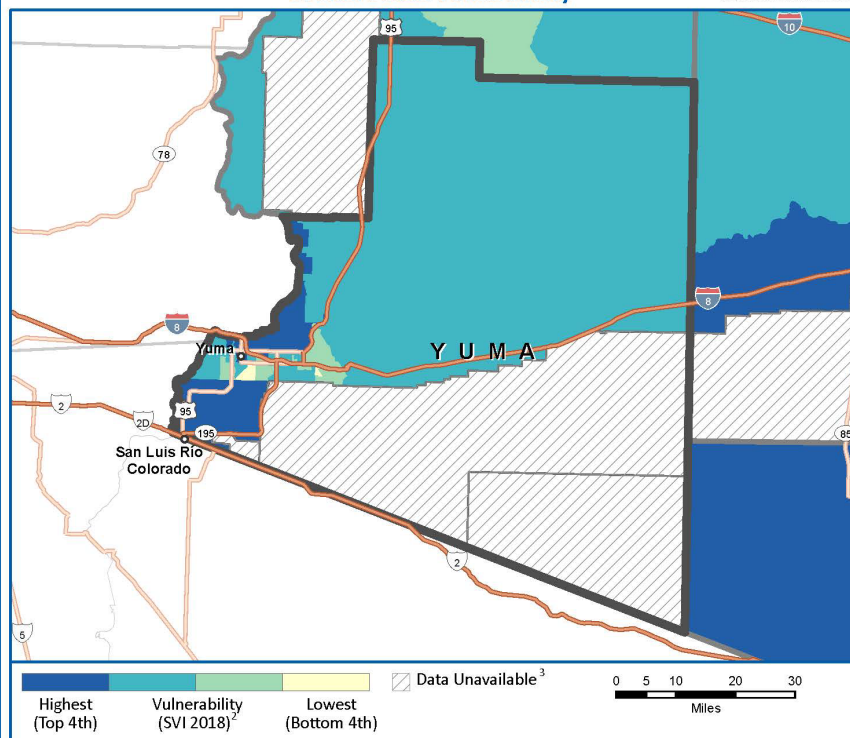
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# CDC Social Vulnerability Index 2018

Yuma County, Arizona

PART 1

## Overall Social Vulnerability<sup>1</sup>



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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 3/16/2023

Agency for Toxic Substances and Disease Registry  
Division of Toxicology and Human Health Sciences

GRASP

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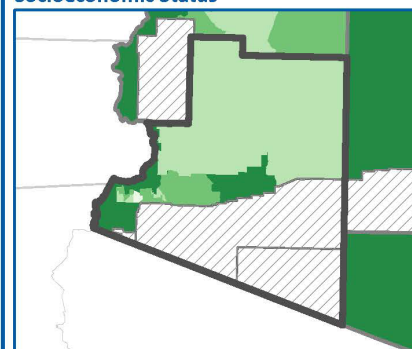


CDC SVI – YUMA COUNTY, ARIZONA

PART 2

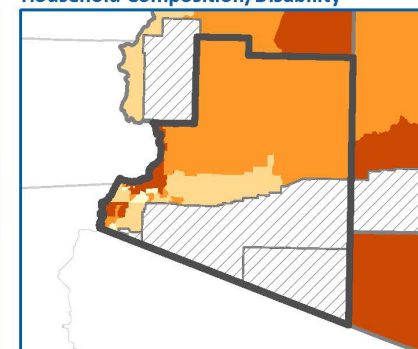
## CDC SVI Themes

### Socioeconomic Status<sup>5</sup>



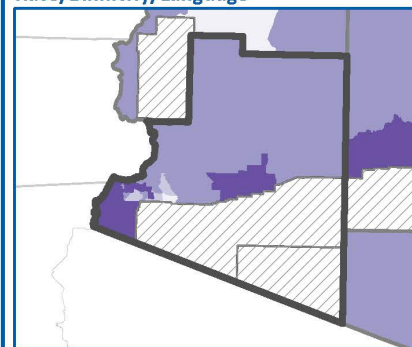
Highest (Top 4th) Vulnerability (SVI 2018)<sup>2</sup> Lowest (Bottom 4th)

### Household Composition/Disability<sup>6</sup>



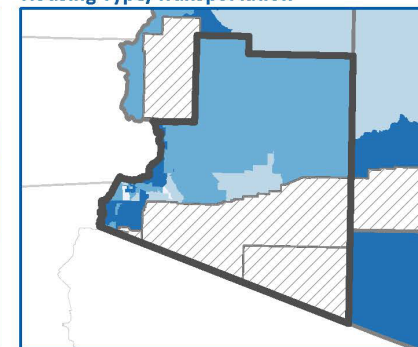
Highest (Top 4th) Vulnerability (SVI 2018)<sup>2</sup> Lowest (Bottom 4th)

### Race/Ethnicity/Language<sup>7</sup>



Highest (Top 4th) Vulnerability (SVI 2018)<sup>2</sup> Lowest (Bottom 4th)

### Housing Type/Transportation<sup>8</sup>



Highest (Top 4th) Vulnerability (SVI 2018)<sup>2</sup> Lowest (Bottom 4th)

Data Sources: <sup>1</sup>CDC/ATSDR/GRASP, U.S. Census Bureau, Esri<sup>®</sup> StreetMapTM Premium.

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

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

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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3. Arizona Developmental Disabilities Planning Council. Disability data for Arizona. <https://addpc.az.gov/disability-data-arizona>. Published 2020. Accessed February 14, 2022.
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14. AzCHER Western Region Community Hazard Vulnerability Assessment. Updated December 2020.
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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	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	<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>