

DESCRIPTION

Every community must prepare for and respond to hazardous events, whether a natural disaster like a tornado, a disease outbreak, or a human-made event like a harmful chemical spill. Many factors, including poverty, lack of access to transportation, and crowded housing may weaken a community's ability to prevent human suffering and financial loss in the event of disaster. These factors are known as social vulnerability. Social vulnerability may impact the resilience of communities when confronted by external stresses, such as natural or human-caused disasters. Reducing social vulnerability can decrease both human suffering and economic loss.¹

The Agency for Toxic Substances & Disease Registry (ATSDR) at the Centers for Disease Control and Prevention developed a national social vulnerability index (SVI) to identify areas most likely to need support to prepare for, respond to, and recover from a hazardous event. The SVI ranks each census tract on several factors. Areas with higher percentages of minorities, people who have limited English proficiency, persons below poverty, unemployed, and without a high school diploma as well as lower per capita income will have a higher vulnerability score. Areas with higher percentages of persons age 65+, age 17 and younger, residents with a disability and single parent households with young children, multi-unit housing, mobile homes, crowded homes, no vehicle access, and institutionalized group quarters will also have a higher vulnerability score.¹

HOW WE ARE DOING

Areas of moderate to high vulnerability for socio-economic status located areas along and north of I-94, St. Paul's East Side and West Side and parts of Mounds View.

Areas of moderate to high vulnerability for household composition and disability are along and north of I-94, St. Paul's East Side and West Side and parts of Mounds View, New Brighton, Maplewood, White Bear Lake, Roseville and Little Canada.

Areas along and north of I-94, St. Paul's East Side and West Side and in parts of Mounds View, St. Anthony, Maplewood, Lauderdale, Falcon Heights and Little Canada have the most residents with limited English language proficiency.

Areas of high vulnerability in Ramsey County are predominantly in St. Paul along and north of I-94, St. Paul's East Side and West Side, and in parts of Mounds View, New Brighton and Roseville.

DISPARITIES AND RISK FACTORS

The social and economic marginalization of certain racial and ethnic groups, including ongoing real estate discrimination, have rendered these populations more vulnerable at all stages of disaster or event. Multi-unit housing in densely populated areas also poses a heightened risk for tenants.¹

Children under 17 years of age are more vulnerable due to the developing state of their immune systems and their dependence on adult supervision. In addition, their bodies are not able to regulate temperature as well. Older adults tend to be more vulnerable to the negative impacts of climate change especially extreme weather events, such as periods of intense heat and humidity. Vulnerability is due to a variety of factors, such as limited mobility, existing chronic conditions or multiple illnesses, and dependence on others for basic care needs. People with disabilities may have additional special needs that often require support from others.¹

Information to note

- Areas of high vulnerability in Ramsey County are along and north of I-94, St. Paul's East Side and West Side and in some areas of Mounds View, New Brighton, & Roseville.

¹Centers for Disease Control and Prevention. The Agency for Toxic Substances & Disease Registry. The social vulnerability index. <https://svi.cdc.gov/>. Accessed July 2018.

Housing quality is an important factor in evaluating disaster vulnerability. It is closely tied to personal wealth; that is, poor people often live in more poorly constructed houses or mobile homes that are especially vulnerable to strong storms.¹

Mobile homes may not be designed to withstand severe weather or flooding and typically do not have basements. They may not be readily accessible by interstate highways or public transportation. Also, because mobile homes are often clustered in communities, the overall vulnerability of their inhabitants is increased.¹

People living in high-rise apartments are vulnerable to overcrowding when funneled into a limited number of exit stairwells. Furthermore, large numbers of people exiting in the street can make safe and orderly evacuation of everyone difficult and dangerous. Crowding within existing housing units may exacerbate these difficulties.¹

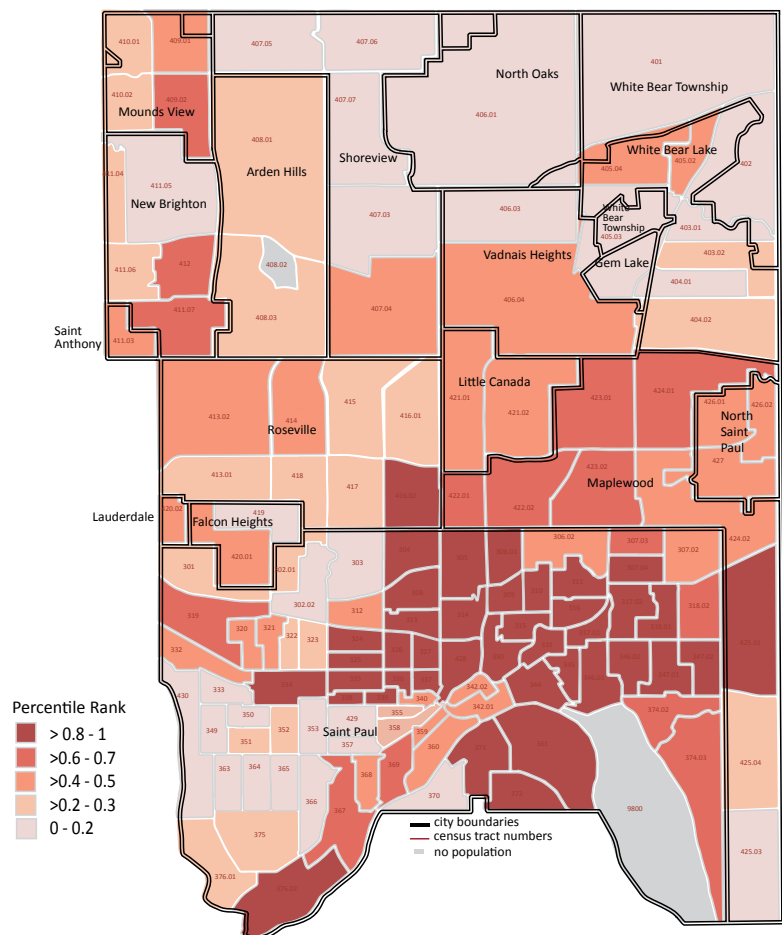
Rates of automobile ownership are generally lower in urban areas. Transportation out of an evacuation zone is problematic for people who do not have access to a vehicle. For some people, fuel costs may prevent vehicle use.¹

Populations residing in group quarters such as college dormitories, psychiatric institutions, and prisons also present special concerns during evacuation. Residents of nursing homes and long-term care facilities are especially vulnerable because of their special and timely needs. Known issues around understaffing in emergencies may exacerbate underlying health issues in the populations. Moreover, many institutions are unprepared to quickly remove their entire staff and residents under conditions that require specialized vehicles.¹

WHAT RAMSEY COUNTY GOVERNMENT IS DOING

Ramsey County uses social vulnerability index data to identify communities that will need extra support during emergencies. This includes estimating the amount of needed supplies like food, water, medicine and bedding, and the number of emergency personnel required to assist people living in more vulnerable communities.

Social Vulnerability by Census Tract, Ramsey County, 2016



Source: Centers for Disease Control and Prevention.²

² Source: Centers for Disease Control and Prevention. The Agency for Toxic Substances & Disease Registry. The social vulnerability index. <https://svi.cdc.gov/>. Accessed July 2018.