

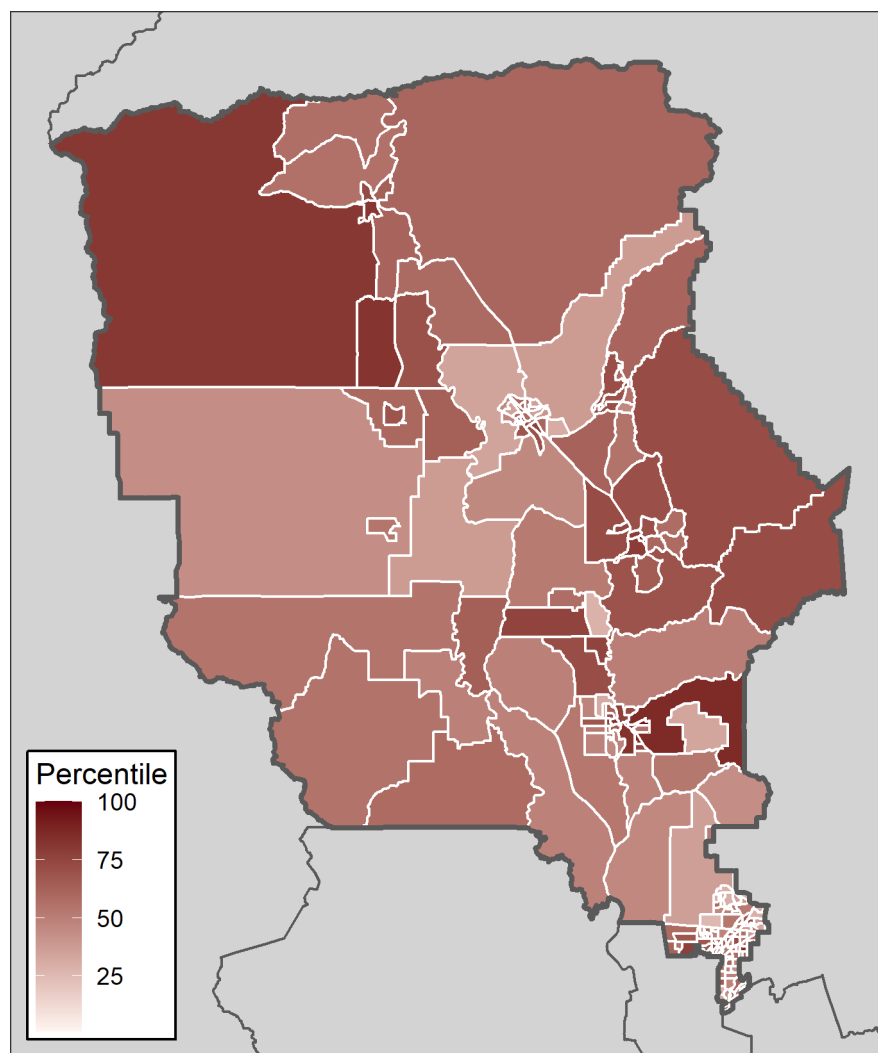
Senate District 4

Background

The statewide shelter-in-place orders have caused tremendous economic disruption. However, the experiences of individual households have been far from uniform. Those employed in essential industries, or those able to work remotely, are experiencing less negative impacts. Similarly, households with access to reliable infrastructure, economic reserves, and social resources are more resilient to economic disruption. By combining these two aspects of household vulnerability, this factsheet attempts to identify which communities are most likely to suffer negative economic impacts from coronavirus lockdown orders in California.

This first map shows the overall vulnerability of the US Census tracts to economic disruption. The subsequent sections show the individual-level employment vulnerability, household-level social vulnerability, and selected component indicators of the social vulnerability in final section.

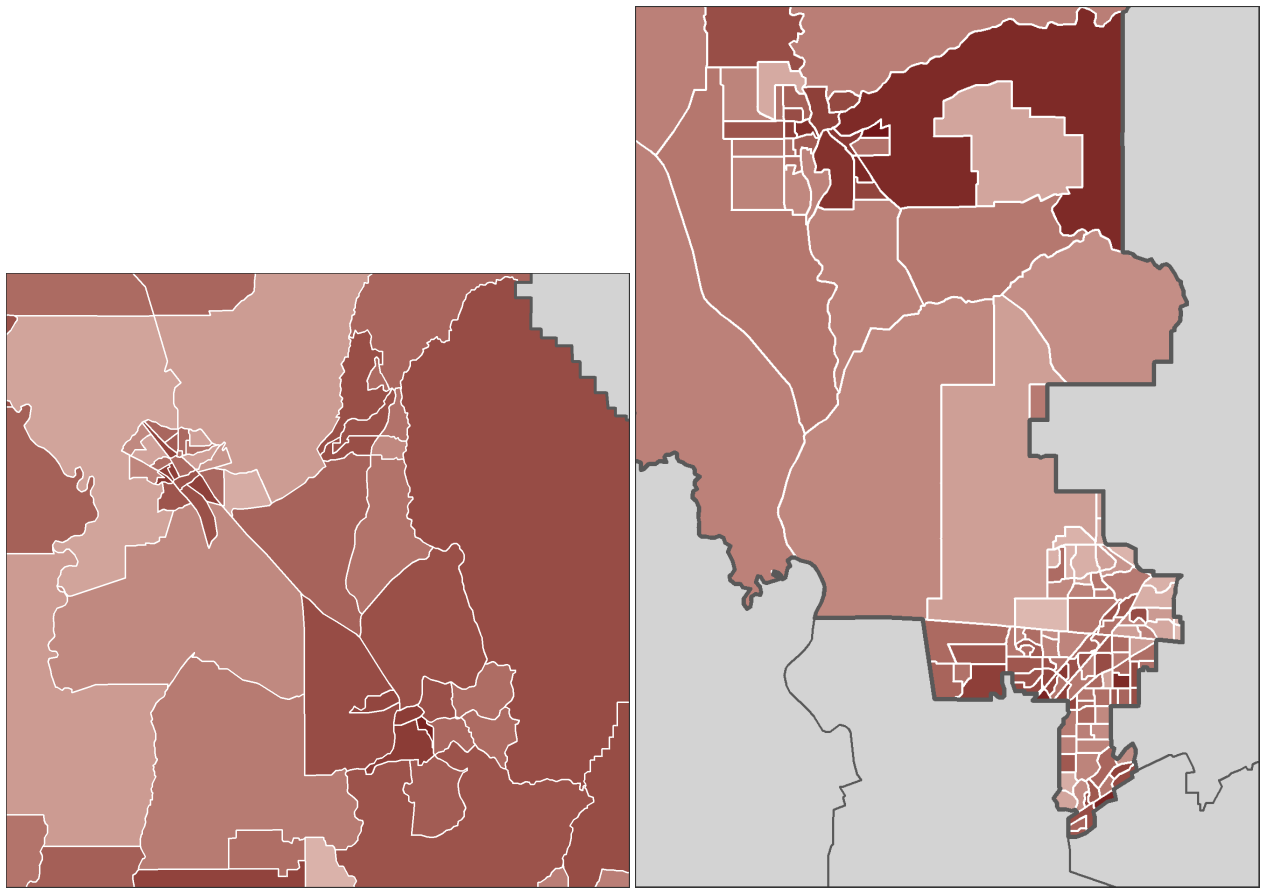
Cumulative Economic Impact of Lockdown on Households by Tract



The overall vulnerability of Senate District 4 is concentrated around the northwestern part of the region with areas such as Corning, Yuba City, and Linda being some of the most vulnerable. Occupational vulnerability for Senate District 4 follows the same trend lines as that of the overall vulnerability for the region. In Senate District 4 the most socially vulnerable areas are those around the easternmost part of the district., Overall

vulnerability is higher in the North and East of the district especially in Oroville and Yuba City. Job loss vulnerability follows a similar pattern and social vulnerability is distributed throughout the district.

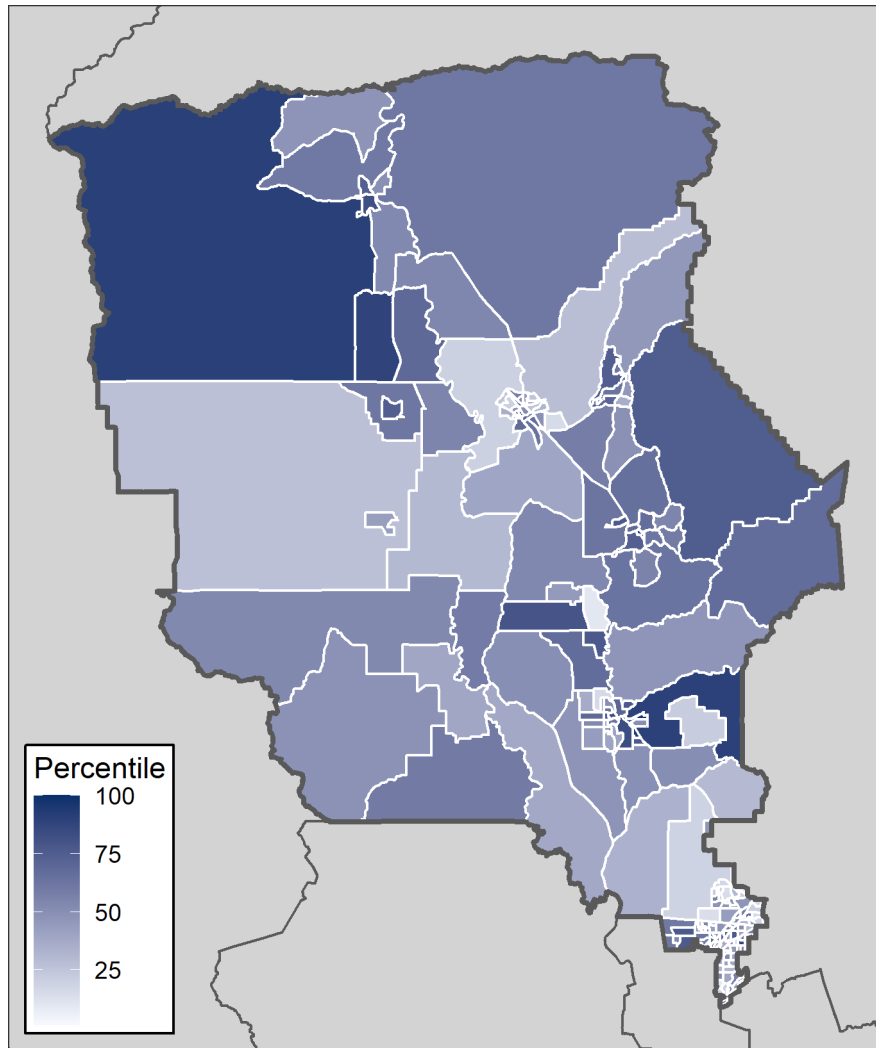
District Insets



Combined Vulnerability to Job Loss by Tract

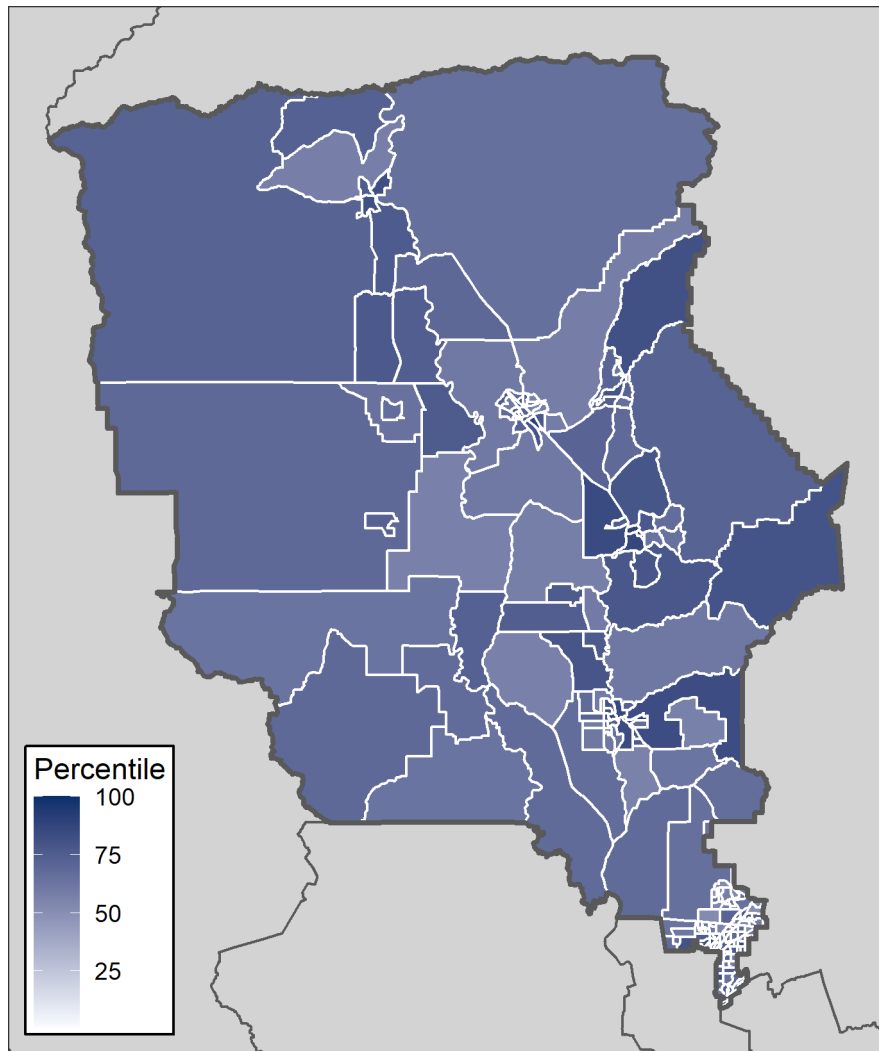
This map predicts levels of unemployment caused by the lockdown order by census tract. It combines data from a St. Louis Federal Reserve analysis (Gascon 2020) of the risk of unemployment from the Covid-19 lockdown for over 800 occupations with American Community Survey data on occupations by Census tract.

Risk of unemployment is determined by each occupation's suitability to work from home, the ratio of essential to non-essential workers and whether the role tends to be salaried or not.



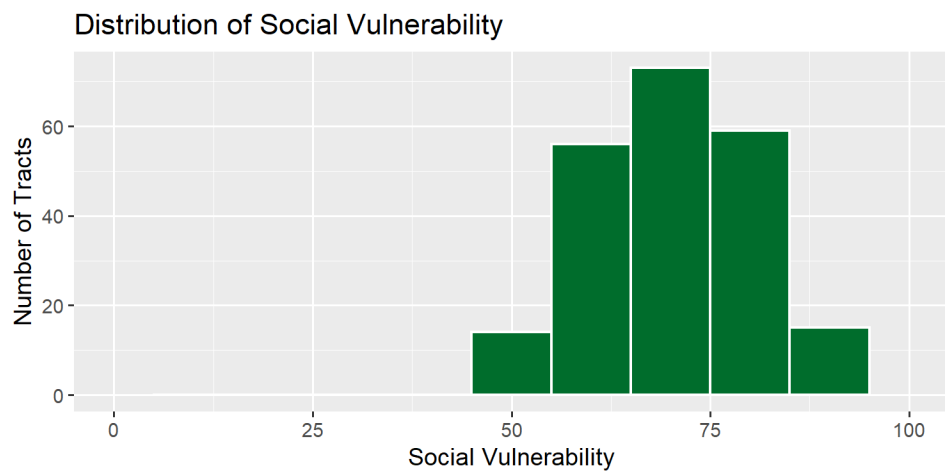
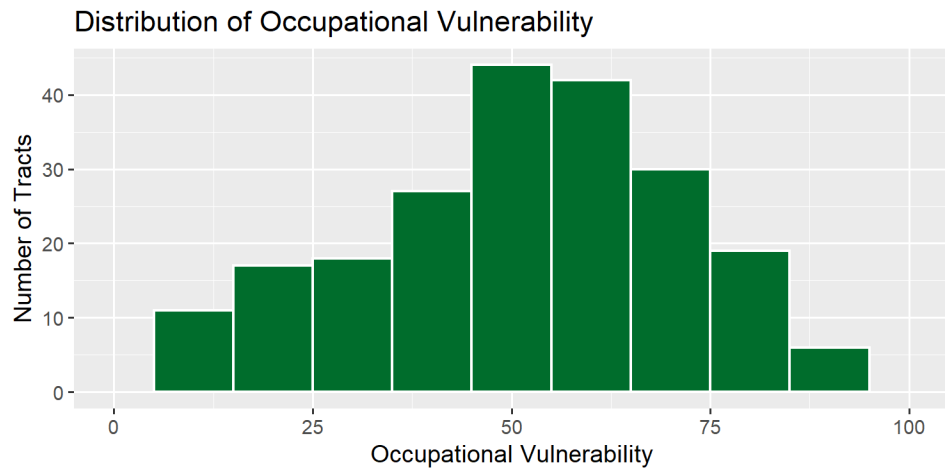
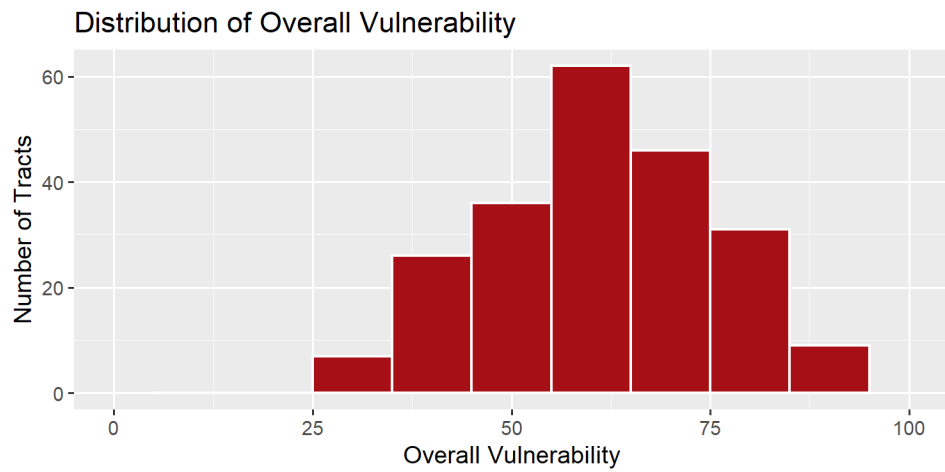
Combined Social Vulnerability by Tract

This map indicates the degree of social vulnerability at the Census tract level. Social vulnerability is the opposite of social resilience. It refers to the likelihood an individual or household will suffer negative consequences if they experience shocks or stresses, such as a job loss.

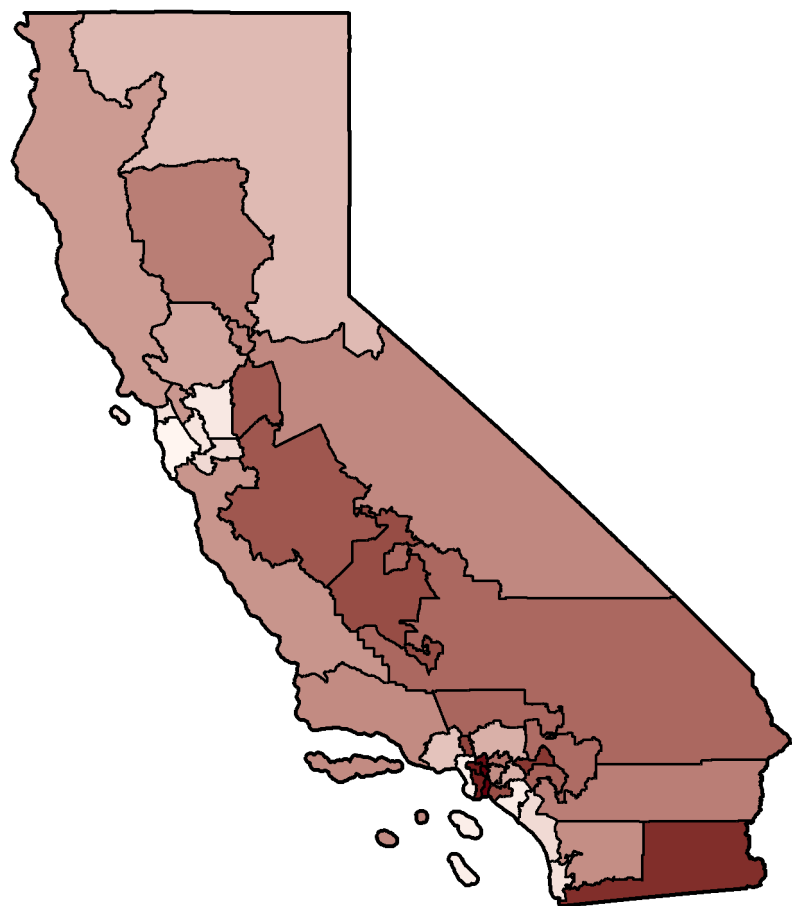


Histograms

Distribution of 1) Cumulative Economic Impact, 2) Vulnerability to Job Loss, and 3) Social Vulnerability by tract, within the district.



Cumulative Economic Impact of Lockdown on Households by District



Selected Individual Social Vulnerability Measures

Our measure of social vulnerability is made of 26 separate household-level indicators relevant to an individuals and a household's ability to withstand shocks and stresses. The majority of the variables are derived from prior literature; however, our measure also includes a small number of variables that are missing from most mainstream measures of social vulnerability, and are meant to capture unique aspects of the Covid-19 shelter-in-place orders.

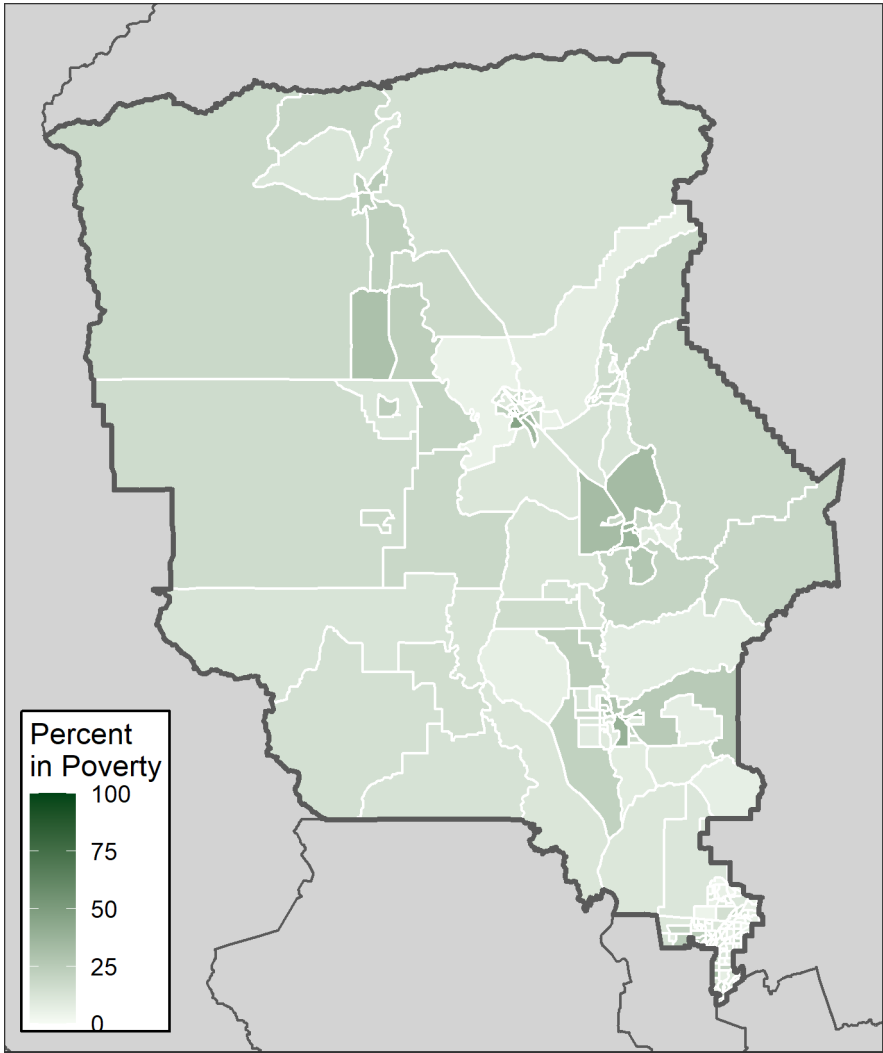
Maps for five highlighted indicators are published in the following pages. Individual maps for the rest are available from our interactive website at http://WEBSITE_HERE,

- Median age of the population in each community.
- Percentage of family households with only one parent present.
- Percentage of the population who are married with their spouse present.
- Percentage of the population who moved from out of state or abroad in the past year as of 2018.
- Percentage of female-headed households
- Percentage of households with undocumented individuals
- Percentage of households where over 30% of their income goes to paying rent
- Percentage of households who rent rather than own
- Percentage of households on public assistance such as SNAP or TANF
- Percentage of individuals that work part-time only
- Percentage of individuals without health insurance
- Percentage of individual without a diploma or equivalent
- Percentage of household with one or less earners
- Percentage of households where over 30% of their income goes to paying mortgages + utilities
- Percentage of individuals with a diploma or equivalent, but no college degree
- Percentage of households that are below the poverty line

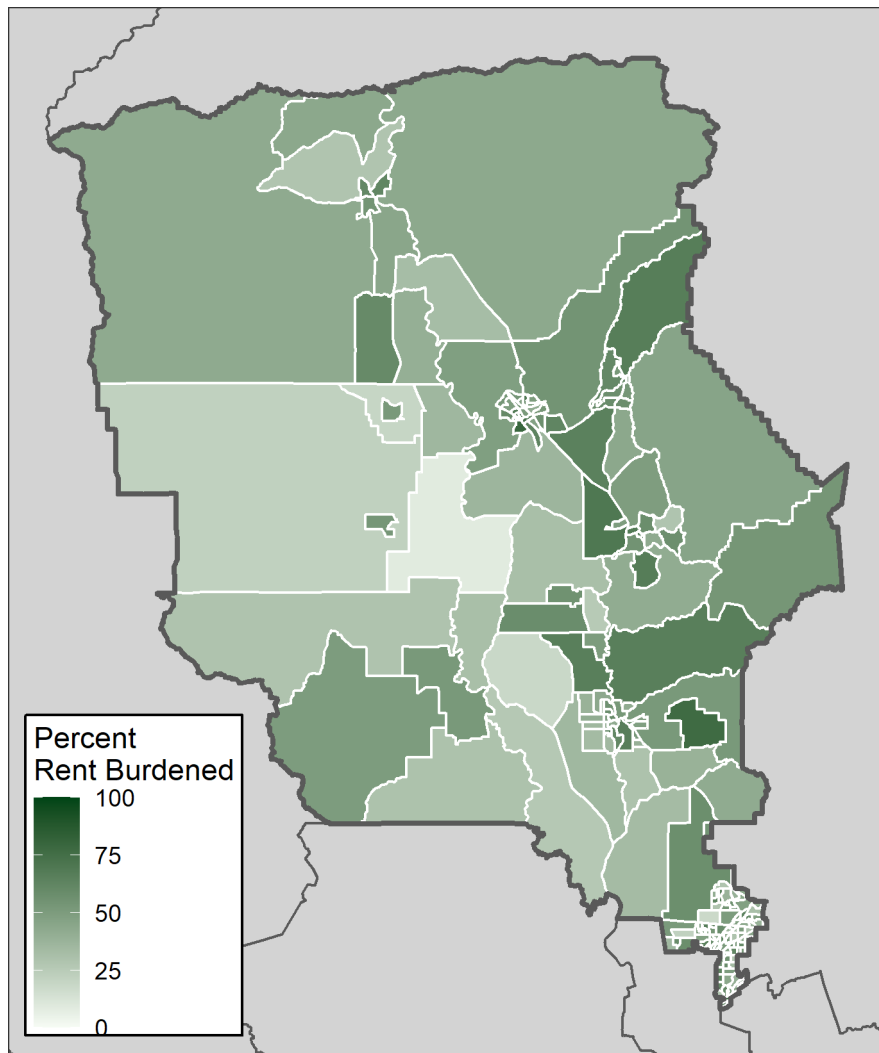
Covid-19 Relevant Indicators

- Percentage of children under age 10 enrolled in public school that are likely to need parental supervision due to shelter-in-place orders.
- Percentage of children with a disability.
- Percentage of households with low quality housing
- Percentage of individuals with only employment-based health insurance
- Percentage of individuals who rely on public transit to commute and own a car
- Percentage of individuals who rely on public transit to commute and do not own a car
- Percentage of individuals who do not own a computer
- Percentage of Individuals who own a smartphone and no other computing device
- Percentage of households with access to low speed internet only
- Percentage of households with no access to internet

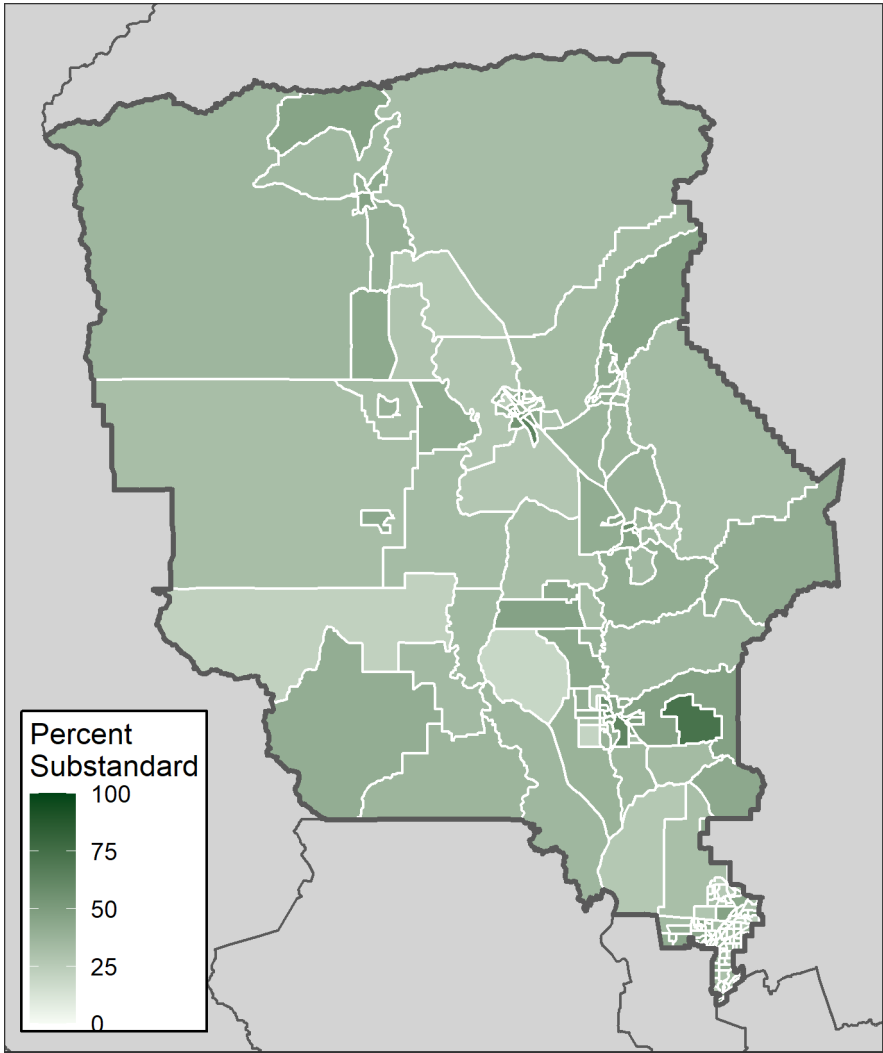
Percentage of Households in Poverty by Tract



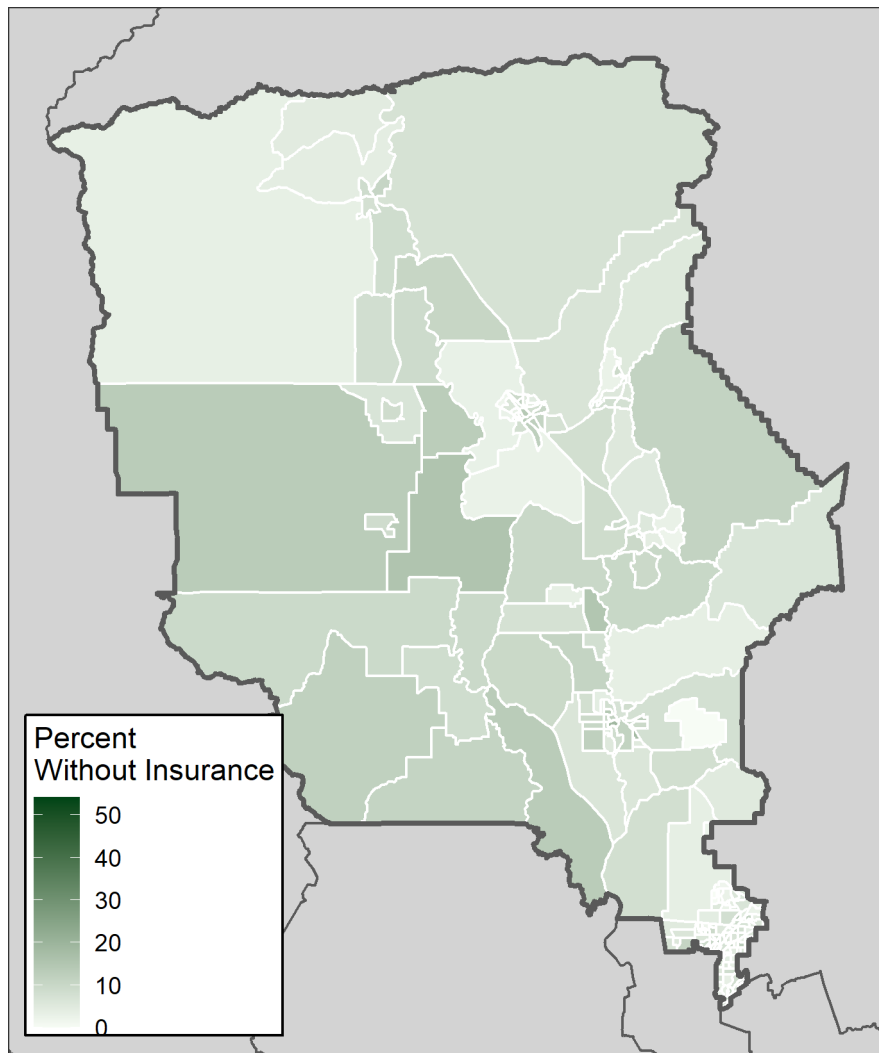
Percentage of Rent-Burdened Households by Tract



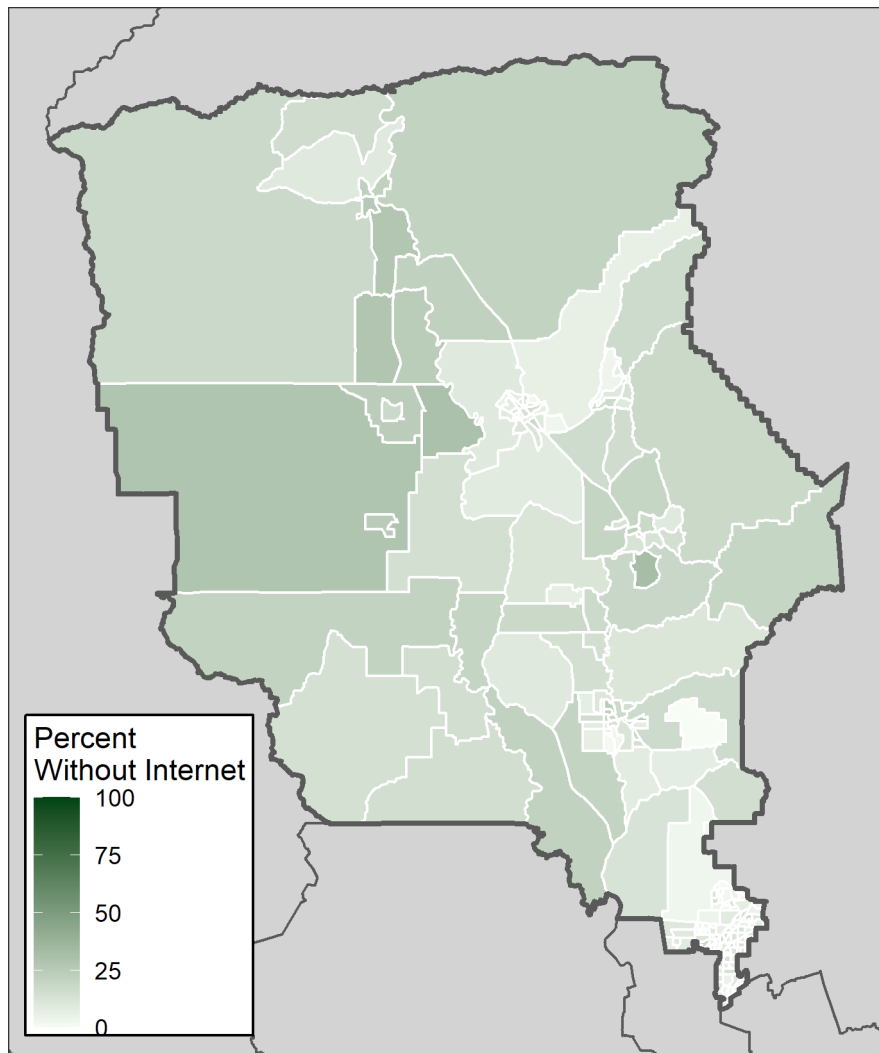
Percentage Households Living in Substandard Housing by Tract



Percentage of Individuals with No Insurance by Tract



Percentage of Households with No Internet Access by Tract



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