

## CS 6140 P1: Proposal

Our group members are Kurt Namini and Grace Liu. We plan to use Point-in-Time (PIT) estimates of homelessness from 2010-2022 from the US Department of Housing and Urban Development and potentially estimates for state population totals from 2010-2022 US Census data and/or real estate datasets.

We would like to cluster the homelessness data by Continuum of Care (CoC) Program, of which there were 383 between the 50 states in 2022. The clusters could reveal which states or areas within a state are most affected by homelessness or are required to provide aid. Further analysis could provide insight into the demographics observed within each cluster.

We intend to use multiple clustering methods, and each may produce characteristically different clusters that may require different interpretations. For further analysis, we could use census data to account for each state's total population change or real estate data to analyze the effect of the housing market on housing inventory.

Homelessness is relevant to any person living in the United States, especially in regions of states like California or Utah. Our use of multiple clustering methods will produce different sets of clusters to interpret, and the additional data will allow us to make additional conclusions.