**Background:**

According to the U.S Department of Housing and Urban Development (HUD), an average of 553,000 people in America experienced homelessness on any given night in 2018. To add onto this concerning statistic, according to endhomelessness.org, in 2017 in the United States alone, more than 40 million people were living in poverty and 18.5 million were living in deep poverty and at risk of becoming homeless. Over the years, the number of homeless in the United States has been growing. In fact, the number of homeless people on a single on a single night increased by 0.3 between 2017 and 2018. Looking more in depth into our state, in Massachusetts in 2018, it was reported that there was a total homeless population of 20,068 (this means that 29 out of every 10,000 people are experiencing) homelessness. This was a significant 14.2% jump from 2017 and a 20.6% increase from 2010. Overall, as we continually move into the future, homelessness is continually on the rise and is more prominent and relevant than ever. Using the data supplied to us which is listed below, our group is hoping to analyze homeless data and come up with insights that may shed better light on the state of homeless in Massachusetts as well as the general country.

The first data-set we used in this study was the 2007 - 2018 Point-in-Time Estimates by CoC. This data set contains counts of sheltered and unsheltered people experience homelessness on a single night in january. This data set was taken by various CoC’s across the United States. CoC;ss are known as Continuums of Care which are local planning bodies that coordinate housing and services funding for homeless individuals and families. Specifically, this data splits the counted homeless into groups such as individuals, people in families, chronically homeless, veterans, unaccompanied youth and more. The counted data also separates these people into further sub categories based upon whether those experiencing homelessness are sheltered or nor, in emergency shelter, transitional housing as well as safe havens.

The second data-set our group used in our study was the 2007 - 2018 Point-in-Time Estimates by State which holds the same stats as the CoC data but is based off statewide data instead of individual CoC’ss.

The third and fourth datasets we utilized was the 2007 - 2018 Housing Inventory Count by CoC as well as the 2007 - 2018 Housing Inventory Count by State. These two data sets are point int time inventory counts of provider programs within a given CoC that provide beds and units dedicated to serve people who are experiencing homelessness. These programs are split into five groups and are five Program Types: Emergency Shelter; Transitional Housing; Rapid Re-housing; Safe Haven; and Permanent Supportive Housing. Much like the last two datasets, there are two sets, one that has the data for each given CoC as well as one that is overall provider data for a given state.

**Research Questions:**

How does data in homelessness vary across each state?

How has homelessness statistics changed over the past few years (since 2007 )?

Looking at Massachusetts Specifically, how does homelessness vary (what does historical data look like? | what is the distribution of homelessness across groups and shelters | what does Mass’ homelessness look like when comparing CoC’s and the rest of the U.S)?

Is Massachusetts homelessness data in 2018 different from the rest of the population? (U.S Hypothesis Test)

Is Boston’s CoC data different from all non-Boston Mass CoC data? (hypothesis test)

Comparing Boston’s CoC to the 10 other randomly chosen cities in the US, is the data different? (hypothesis test)

**Data-sets:**

2007-2018-HIC-Count-by-CoC.xlsx is a dataset that describes the Housing inventory Count broken down by Continuums of Care

2007-2018-HIC-Counts-by-State.xlsx is a dataset that describes the housing inventory count broken down by states.

2007-2018-PIT-Counts-by-CoC.xlsx is a dataset that describes the Point in time count broken down by Continuums of care

2007-2018-PIT-Counts-by-State.xlsx is a dataset that describes the point in time count broken down by states.