Homelessness Crisis in United States
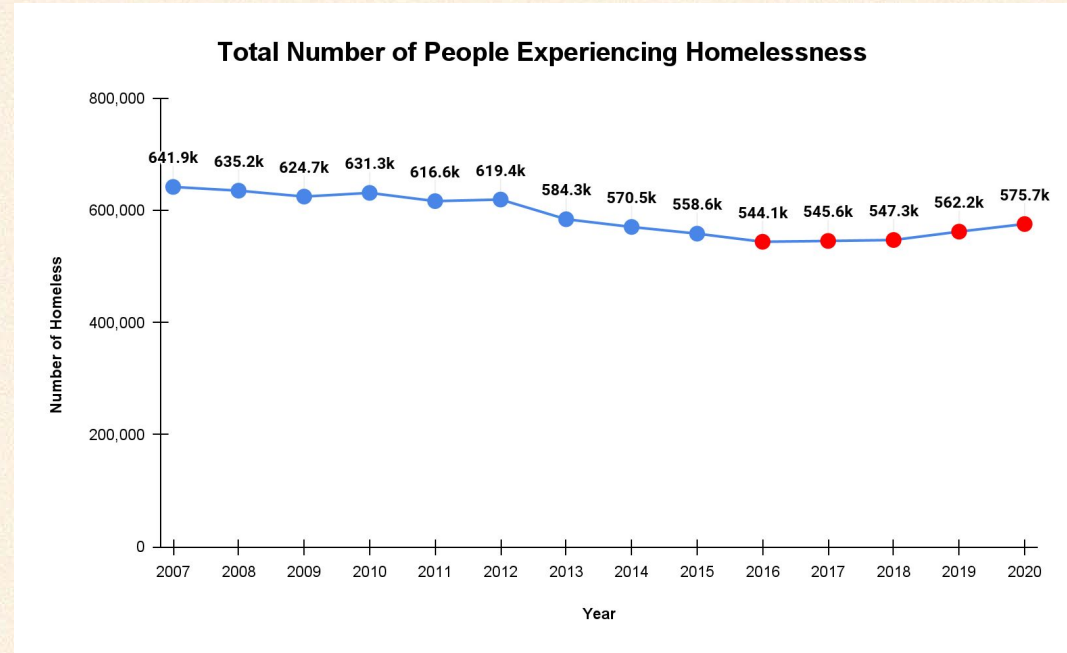
By Stephen Blount

575,714

Individuals experiencing homelessness (2020)

The Dilemma

- Homelessness has been on the rise since 2016

- 2020 saw a 2.4% increase in population size

Total Number of People Experiencing Homelessness

641.9k 635.2k 624.7k 631.3k 616.6k 619.4k 584.3k 570.5k 558.6k 544.1k 545.6k 547.3k 562.2k 575.7k

Number of Homeless

800,000

600,000

400,000

200,000

0

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Year

Challenges

- Homelessness is a complex socioeconomic problem

- Factors in one state do not necessarily contribute to factors in another

- Highly volatile

GOAL

Forecast the population of homeless within each State in the U.S.

- Increase effectiveness of planning & resource allocation

SOLUTION

Construct a time-series predictive model

- U.S.Department of Housing and Urban Development

MEASURES OF SUCCESS

Non-technical

- See a negative trend in true homelessness population
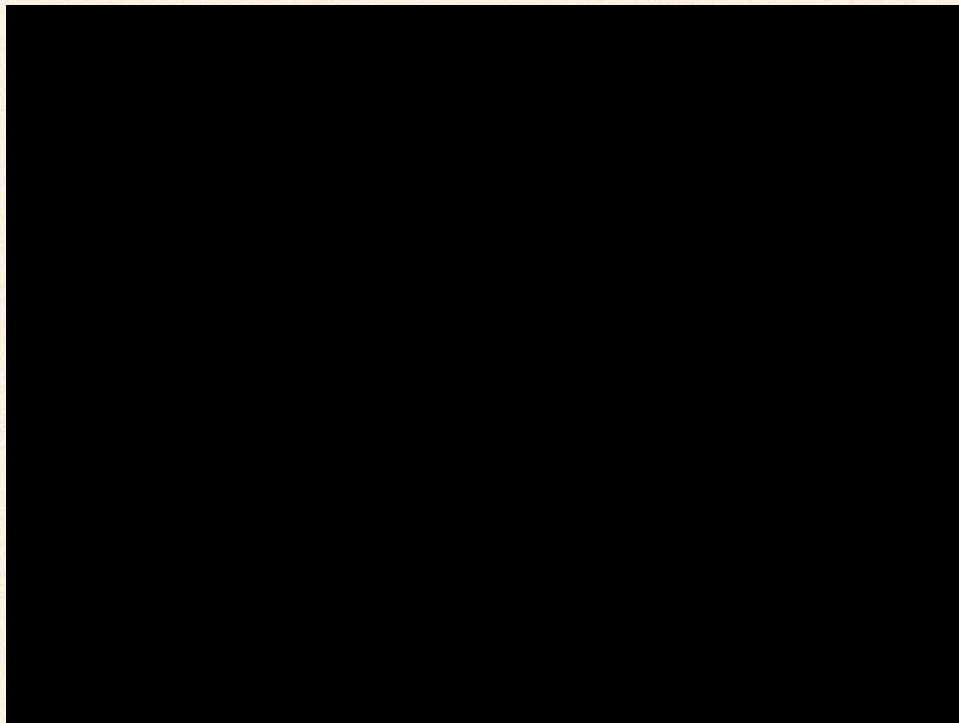
Technical

- High model accuracy

RISKS

Low prediction of homelessness
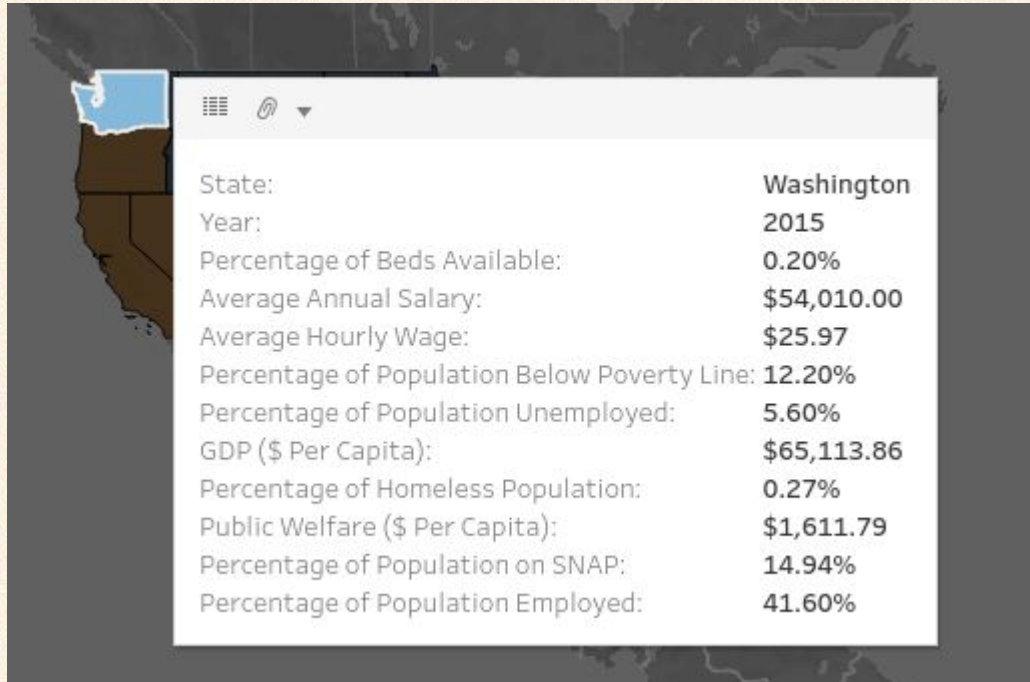
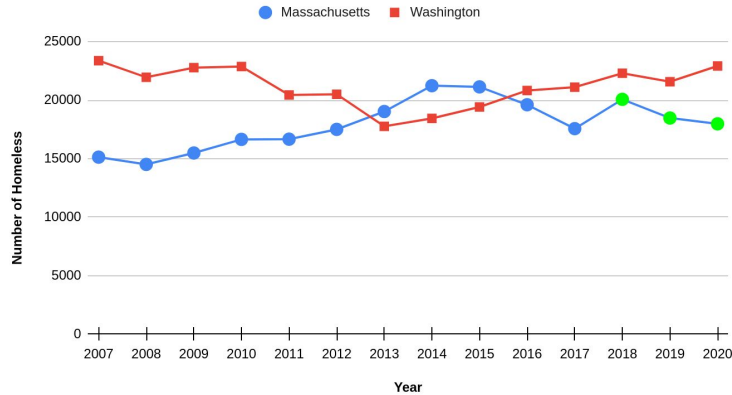- Reduce resource allocation prematurely

Tableau Dashboard

Tableau Dashboard

Initial Results

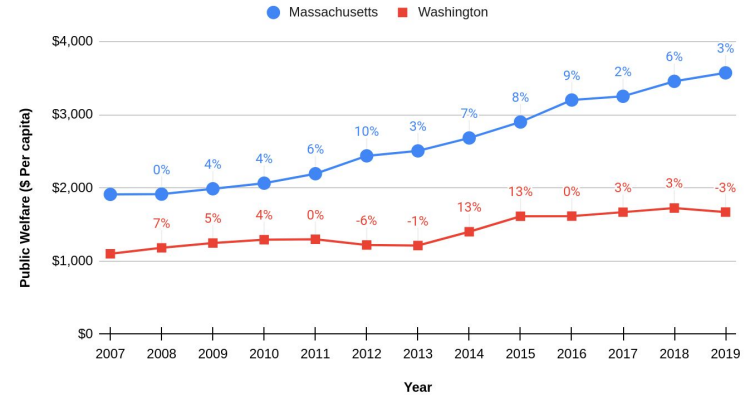Size of Homeless Population Over Time
● Massachusetts ■ Washington

Public Welfare Spend Over Time
● Massachusetts ■ Washington
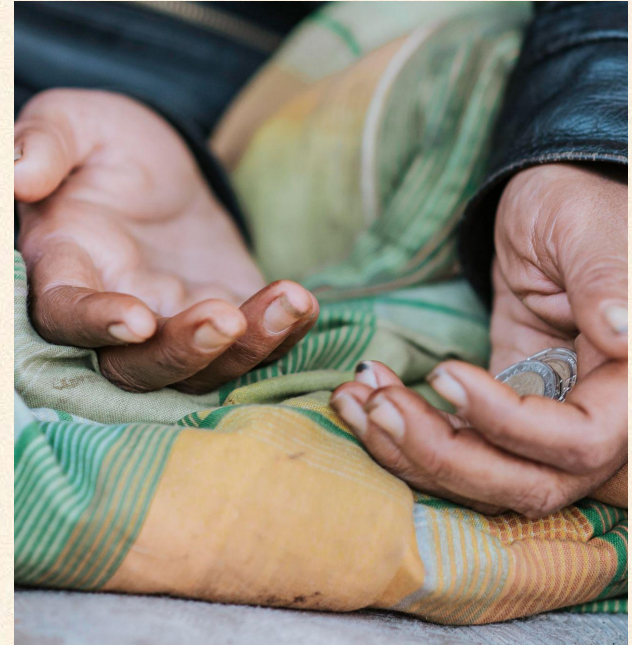
FUTURE WORK

- Collect homelessness population data on a monthly basis

- Compile cost of living data associated with each state

Thanks!

Any questions?

Tableau Link:
https://10ay.online.tableau.com/t/stephenblount/views/HomelessnessAnalysis/Dashboard1/6e14483c-d66f-40b8-97dc-1ce2e4e47007/b71f12f0-affa-463b-8336-7919fb6be8aa?:display_count=n&:showVizHome=n&:origin=viz_share_link

RESOURCES

U.S. Bureau of Labor Statistics:
- https://www.bls.gov/oes/tables.htm

U.S. Department of Housing and Urban Development:
- https://www.hudexchange.info/resource/6291/2020-ahar-part-1-pit-estimates-of-homelessness-in-the-us/

Annual Unemployment Rate:
- https://www.icip.iastate.edu/tables/employment/unemployment-states
- https://beta.bls.gov/dataQuery/search

Census Data:
- https://www.hudexchange.info/resource/6291/2020-ahar-part-1-pit-estimates-of-homelessness-in-the-us/
- https://www.census.gov/data/tables/time-series/demo/popest/intercensal-2000-2010-state.html

Bureau of Economic Analysis:
- https://apps.bea.gov/itable/iTable.cfm?ReqID=70&step=1

Tax Revenue:
- https://www.census.gov/programs-surveys/stc/data/datasets.html
- https://cfo.dc.gov/node/232092

Poverty Line Data:
- https://www.census.gov/programs-surveys/saipe/data/datasets.2019.html

Public Welfare Spending:
- https://www.taxpolicycenter.org/statistics/state-and-local-general-expenditures-capita

SNAP Data:
- https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap