

HELPING CITIZENS WITH HEALTH NEEDS ASSESS CITY LIVABILITY WITH PERSONALIZED RECOMMENDATIONS

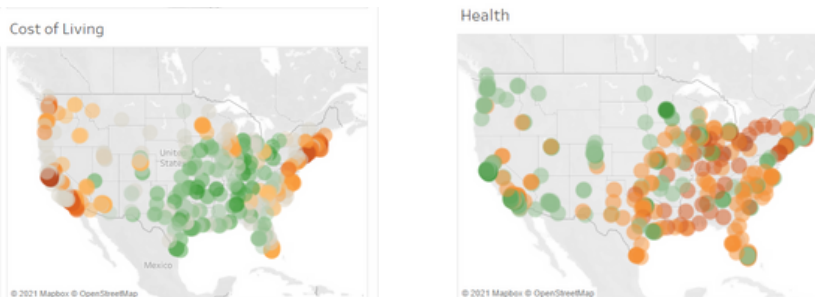
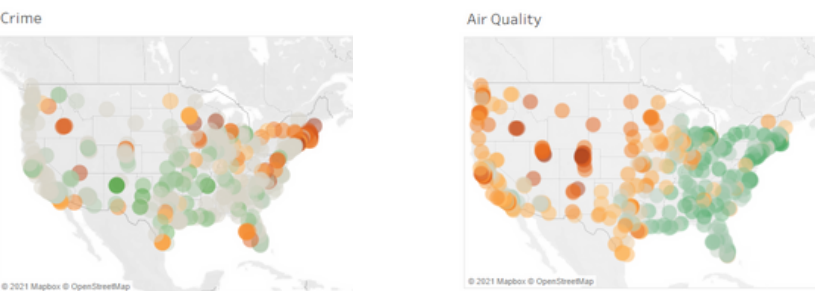
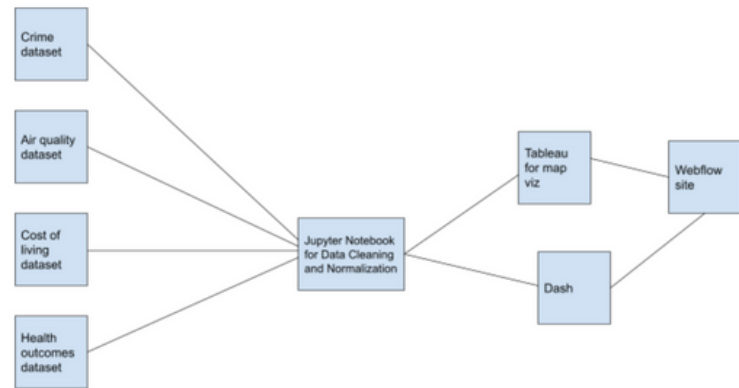
TEAM #26 KNDIA DAVIS, PHILANA BENTON, MERCY BELL, KELSEY COUZZO AND JALISA MAPP

BACKGROUND, DATA AND THE INTERACTIVE WEB APP

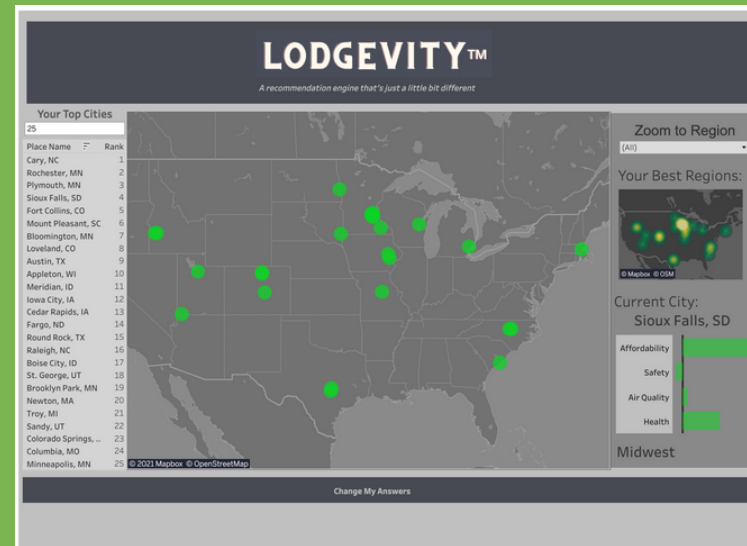
People with chronic conditions or pressing health concerns have complex, nuanced and competing economic, environmental, safety and medical needs. **This can make moving or relocation decision-making challenging.**

Our team used z-scores to replace the raw numbers across 4 city-based data sets (Crime Rate, Cost of Living, Air Quality, and Health Outcomes) so we could normalize across cities and map to health conditions.

Using z-scores allowed us to compare how well a city is measured in one factor relative to other cities and to compare how well another city is maintaining in a subsequent factor relative to other cities.



LOGGEVITY™



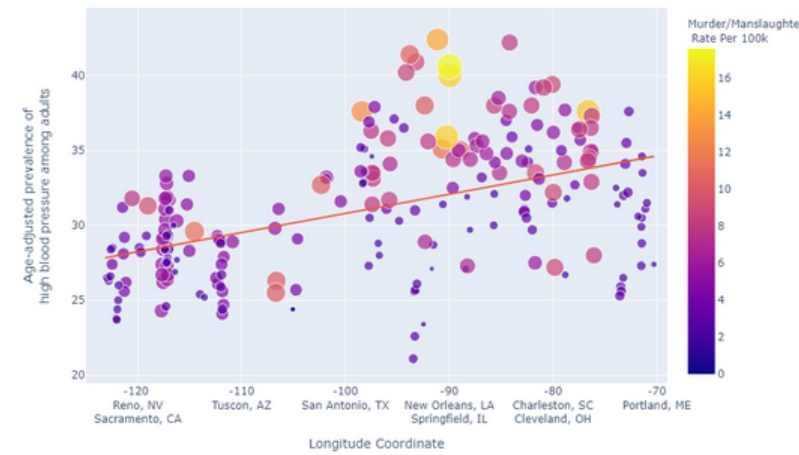
Introducing Longevity™ by Team 26!

An interactive web app that surfaces cities of interest, based on favorable conditions for your health needs, income level and age.

Over time, we hope to build upon the model to ingest additional factors like school performance, walkability and quality of city services to support additional facets of citizen identity.

INSIGHTS FROM OUR ANALYSIS

Logitudinal Location and Per Capita Murder Rate's Relationship to Blood Pressure Outcomes



Crime Rate and Blood Pressure

Crime Rate and Blood Pressure are strongly correlated. Living in an area with violent crime could be a major contributor to stress, which negatively impacts blood pressure outcomes. Violent crime is also associated with poverty, a well-evidenced contributor of stress as well.

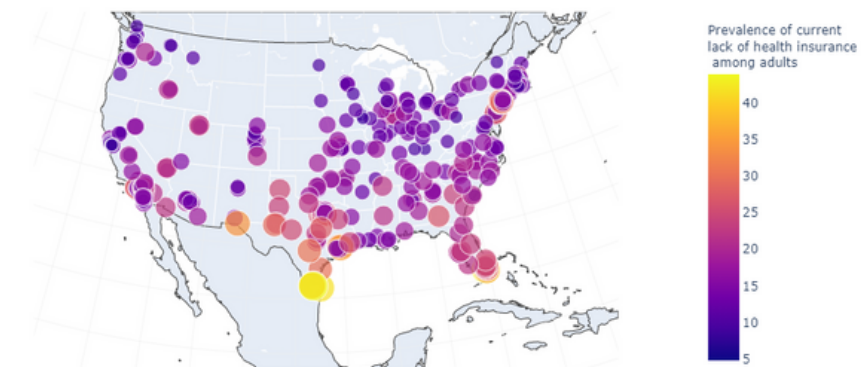
Related article: "Association of Rising Violent Crime With Blood Pressure and Cardiovascular Risk: Longitudinal Evidence From Chicago, 2014-2016" <https://pubmed.ncbi.nlm.nih.gov/31414132/>

Insurance Wanes as We Move South

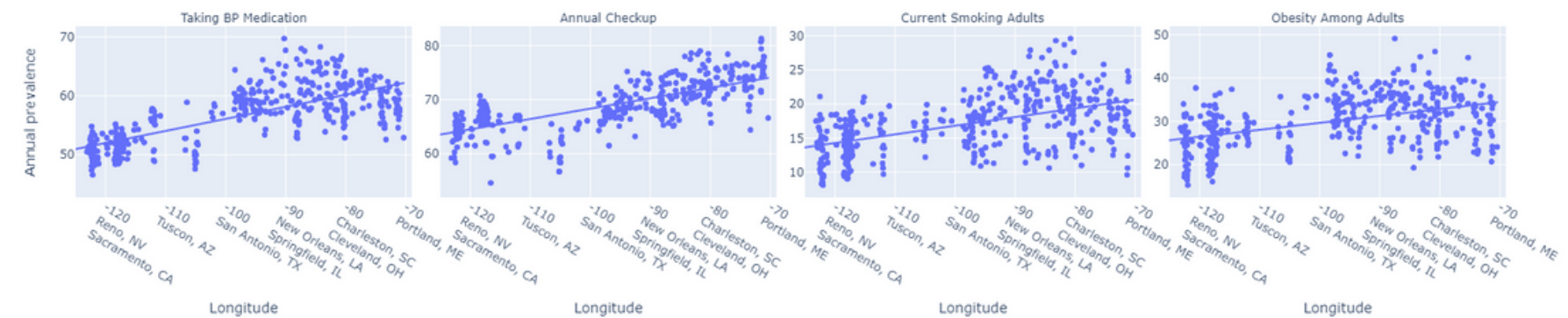
Adult health insurance coverage is much lower in southern parts of the United States. This may be due to lower state support and services. We know the American South comprises about a third of the country's population (37%) but typically have less access to coverage and therefore poor health outcomes.

<https://www.kff.org/racial-equity-and-health-policy/issue-brief/health-and-health-coverage-in-the-south-a-data-update/>

Current lack of health insurance among adults aged 18- 64 Years



Logitudinal Location Relationship to Health Behavior



There is a direct correlation between longitude (west vs. east) and blood pressure medication, annual checkups, current smoking and obesity rates.