# SOCIODEMOGRAPHIC RISK FACTORS OF UNINSURANCE IN ALAMEDA COUNTY, CA

Corina Chung, MS, USC Spatial Sciences Institute

# INTRODUCTION

Health insurance coverage has long been a major concern of the public health field because of its widely documented effect on health. Although there is abundant literature on the risk factors of lacking health insurance coverage, much of the data focus on national-level analysis. This may mask key differences in insurance status rates seen on lower geographic levels. This study sought to identify sociodemographic risk factors of uninsurance in Alameda County, CA and locate communities likely to have high concentrations of individuals without insurance.

## **METHODS**

This study conducted principal component analysis (PCA) to identify variables correlated with uninsurance, using census tract data from the 2010-2012 American Community Survey 3-year Estimates. The PCA was run using JMP Pro 11.0.0. Variables that were highly correlated with uninsurance were identified as risk factors.

## **RESULTS**

The following variables were identified as risk factors of uninsurance: adults without a high school diploma, Hispanics or Latinos, individuals living under 138% of the federal poverty level (FPL), individuals identifying as Other Race, individuals living 138% to 199% of the FPL, immigrants without citizenship, and unemployed adults. These were visualized using 1) equal intervals to compare percentage of risk factors and 2) quantiles to show highest concentrations.

## **DISCUSSION**

Individuals who were uninsured and had risk factors lived in highest concentrations in western Alameda County, especially in Oakland.

For more information: Corina Chung, MS corinach@usc.edu

USCDornsife

Duta and David Decraife

College of Letters, Arts and Sciences

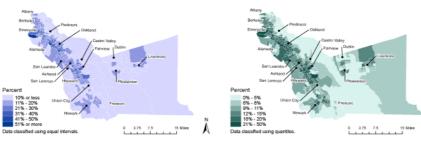
Geographic Information Science and

Tableology of Juntable Programs

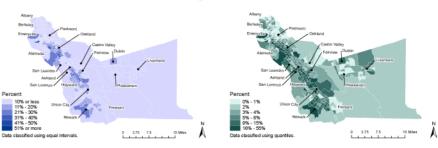
Acknowledgements: The author would like to thank Dr. Katsuhiko Oda, Dr. Karen Kemp, and Dr. Yao-Yi Chiang of the Spatial Sciences Institute at the University of Southern California for their support.

# **VISUALIZATION OF RESULTS**

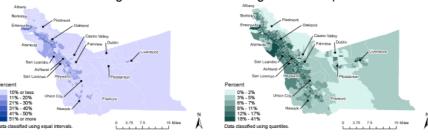
#### Percentage of Uninsured Individuals



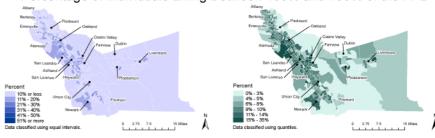
## Percentage of Other Race



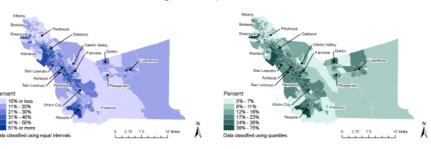
Percentage of Adults without a High School Diploma



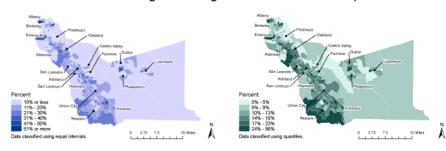
Percentage of Individuals Living Between 138% and 199% of the FPL



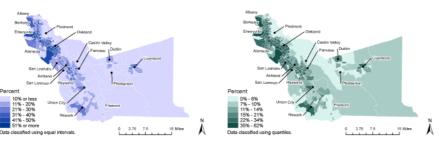
#### Percentage of Hispanics or Latinos



Percentage of Immigrants without Citizenship



## Percentage of Individuals Living Under 138% of the FPL



#### Percentage of Unemployed Adults

