# The Impacts of COVID-19 Impacts on Food Accessibility Among Elementary School Students in California Palo Alto High School Haley Wong and Rebecca Shen-Lorenson Palo Alto Senior High School



### **INTRODUCTION**

- Inaccessibility to proper nutrition is a major factor to the 34 million Americans affected by food insecurity
- COVID-19 has increased accessibility to nutritious foods
- Many school districts, including PAUSD offer free or reduced programs

• Although this program is effective, it is not sustainable for the students

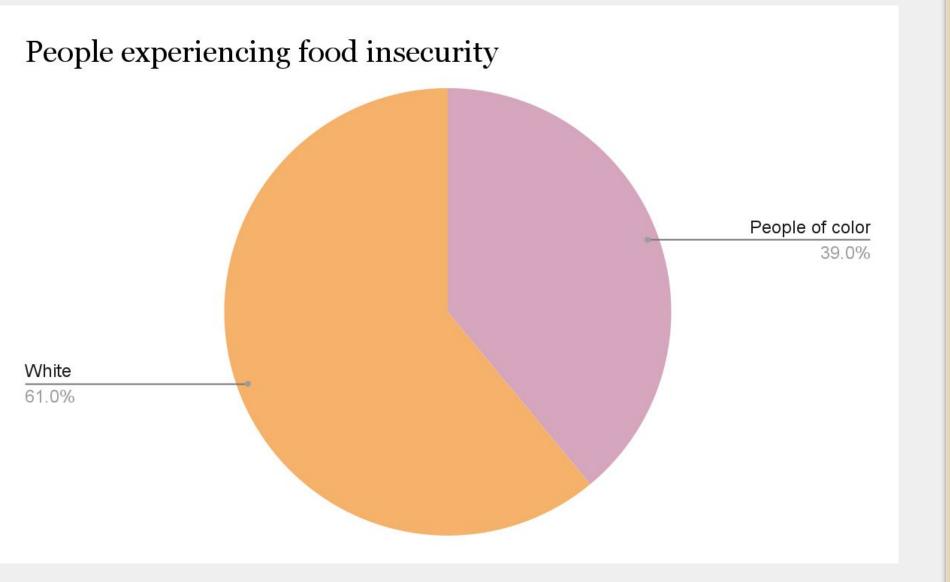


Figure 3: Comparing race to risk of food insecurity

# **RESEARCH METHODOLOGIES**

- Using existing data 0
  - Statistics and general information on the effects of the COVID-19 on children and families
  - Background information on food insecurity and accessibility in California
- Correlation approach 0
  - Relationship between a student's accessibility to a basic need during times of need
- Historical research
  - Comparing "pre-COVID" to COVID-19 times
- Qualitative 0
- Secondary sources 0
- Various graphs, tables, and diagrams

#### DATA AND FINDINGS

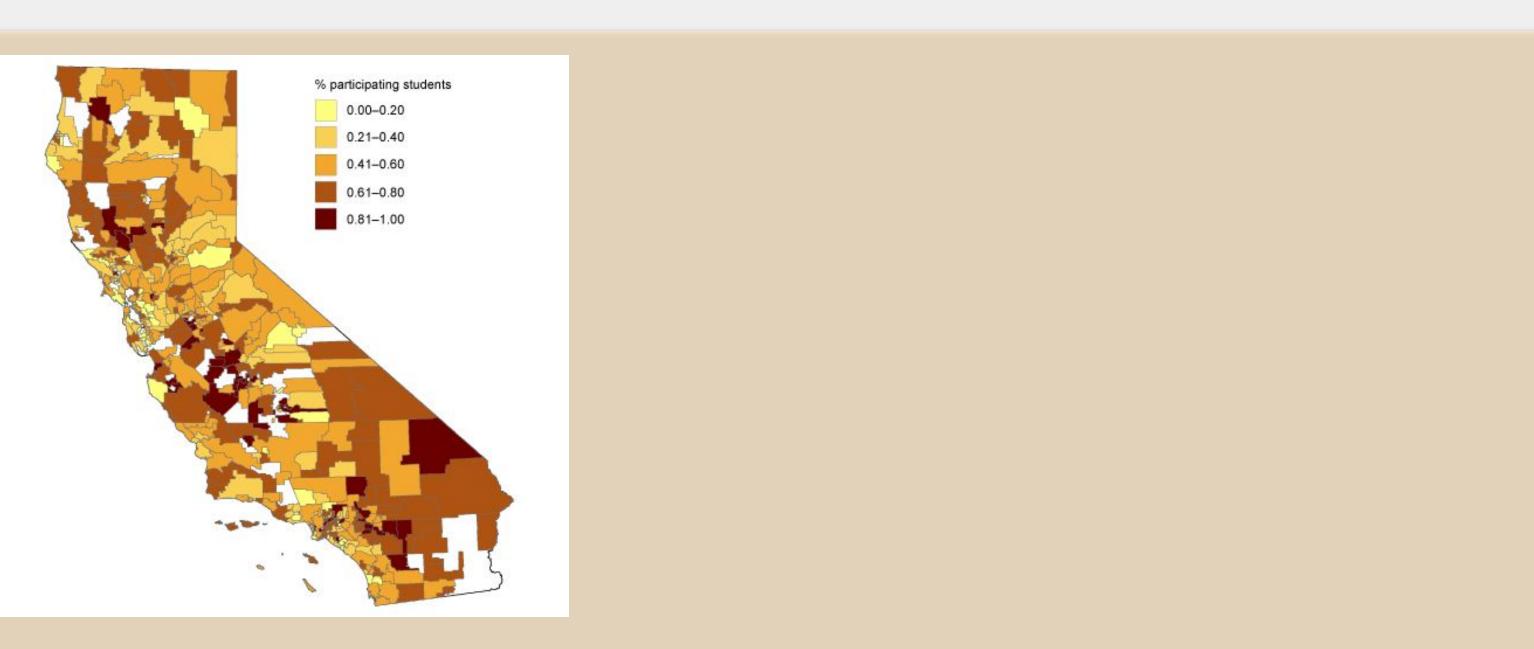


Figure 1: The percentage of students part of reduced or free lunch programs in schools across each county in California.

Comparing median household income to various regions:

- •Overall negative trendline as the region gets broader
- •Palo Alto has one of the the highest median household incomes in the county
- •Comparing Palo Alto to the United States, Palo Alto has over double the median household income
- •Although Palo Alto is among the highest median incomes, many families and students were impacted by COVID-19 on food accessibility

### **CONCLUSIONS AND ANALYSIS**

- among families and individuals
- increase
- •Food banks and pantry use has almost doubled
- pickup during online learning period
- dietary restrictions
- •37% of meal sites offered over the summer
- •Almost 60% of students in California qualified for free/reduced meals
- Hispanics were most likely to experience food insecurity
- •It is likely that there is a direct relationship between food insecurity, mental
- health, and academic performance

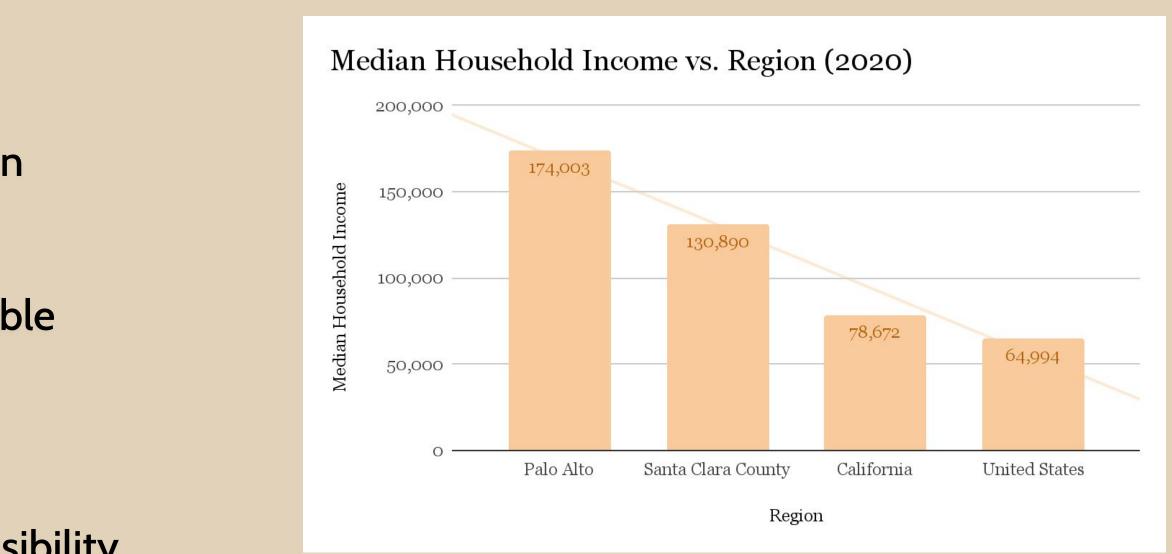


Figure 2: Comparison of various regions and their median household

•Job loss, down 23% during the pandemic affects food accessibility and security

•The pandemic has cause the use of food assistance programs to significantly

•Limited free/reduced lunch programs at school that would deliver/offer on site

•Unlike current school provided meals, sometimes menus were not offered to fit

# **ACKNOWLEDGEMENTS / REFERENCES** Special thanks to Ms. McDaniel, Rebecca Shen-Lorenson and my peers for helping make this project possible.

# Works Cited:

Plank, K., Hewawitharana, S., Talmage, E., Rauzon, S., & Woodward-Lopez, G. (2022). School meal access and changes in meal participation during COVID-19 https://doi.org/10.1016/j.pmedr.2022.101794 28(6), 1008–1009. https://doi.org/10.1002/oby.22813 What Drives Consumers to Purchase Convenience Foods? (2018, July 24). USDA



#### **IMPLICATIONS AND NEXT** STEPS

- Goal: to create a system that makes food accessible to students and families, regardless of age or socioeconomic status
- Create menus to fit dietary needs that provide proper nutrients to students
- Improve academic performance and mental health among elementary school students
- Provide basic needs for elementary students
- Establish communities (geographic, social) that allow for collaboration and provide aid to ones that need it

Cole, K. R. (n.d.). Low Academic Outcomes: A Result of Food Insecurity and Student Mental Health During COVID19. The Aquila Digital Community

https://aquila.usm.edu/honors\_theses/855/?utm\_source=aquila.usm.edu%2Fhonors\_theses%2F855&utm\_medium=PDF&utm\_campaign=PDFCoverPages COVID-19 and Food Security in Asia: How Prepared are We? on JSTOR. (n.d.). https://www.jstor.org/stable/resrep26876

Food Insufficiency and School Meals during COVID-19. (2023). Public Policy Institute of California.

https://www.ppic.org/blog/food-insufficiency-and-school-meals-during-covid-19/

Mahnken, K. (2021, September 20). 'Staggering': New Research Shows that Child Obesity Has Soared During Pandemic.

https://www.the74million.org/staggering-new-research-shows-that-child-obesity-has-soared-during-pandemic/

MeadDave, ;, ;, B. ;. (2020, August 11). The impact of the COVID-19 pandemic on food price indexes and data collection : Monthly Labor Review: U.S. Bureau of Labor Statistics. https://www.bls.gov/opub/mlr/2020/article/the-impact-of-the-covid-19-pandemic-on-food-price-indexes-and-data-collection.htm

Pignotti, G., Dougan, M., Tablas-Mejia, I., Telias, A., & Gounden, A. (2021). Food insecurity and food access during COVID-19 in the San Francisco Bay Area.

College of Health and Human Services, San Jose State University. https://scholarworks.sjsu.edu/cgi/viewcontent.cgi?article=1030&context=nufs\_pub

school closures: A stratified random sample of CalFresh Healthy Living Eligible school districts in California. Preventive Medicine Reports, 28, 101794.

Rundle, A., Park, Y., Herbstman, J. B., Kinsey, E. W., & Wang, Y. (2020). COVID-19-Related School Closings and Risk of Weight Gain Among Children. Obesity,

School District Responses to the COVID-19 Pandemic: Round 6, Ending the Year of School Closures on JSTOR. (n.d.). https://www.jstor.org/stable/resrep25360 School Meals | Healthy Schools | CDC. (n.d.). https://www.cdc.gov/healthyschools/nutrition/schoolmeals.htm

Student Food Pantry: Is access to healthy food a right? on JSTOR. (n.d.). https://www.jstor.org/stable/community.31564197#metadata\_info\_tab\_contents

https://www.usda.gov/media/blog/2018/07/24/what-drives-consumers-purchase-convenience-foods