HEALTHY PLACES INDEX®
COVID-19 Frequently Asked Questions

DECEMBER 2021

WHAT IS THE DIFFERENCE BETWEEN HPI AND THE VACCINE EQUITY METRIC?

The Vaccine Equity Metric (VEM), developed by the State of California, and the Healthy Places Index® (HPI), developed by the Public Health Alliance of Southern California, are built using distinctly differing methodologies. The VEM adapted and altered the standard HPI methodology to produce HPI scores for ZIP Code Tabulation Areas (ZCTAs). The VEM imputed scores for ZCTAs that were excluded from HPI due to concerns with statistical reliability and validity. These are referred to as CDPH-Derived ZCTA Scores (CDZS). CDZS consist of imputed scores for 325 zip codes, representing 220,689 people (0.6% of the California population). The VEM is a combination of these HPI ZCTAs and CDZS. The objective of the VEM was to extend the geographic reach of the Public Health Alliance's HPI and to monitor COVID-19 vaccine coverage at the state level.

The VEM provides analysis and insight into inequities in vaccine allocation, yet is limited in its use ofthe ZIP code geography over Census tracts. The Census tract is the recommended geography to use HPI, because it elevates important neighborhood variation in living conditions that can often be obscured when looking at the ZIP code level. The ZIP code geography is generally much larger than Census tracts and thus is likely to miss important heterogeneity in living conditions and health outcomes apparent at the census tract. When distributing resources at too high of a geography, the unintentional impact of exacerbating systemic inequities may occur.

WHY IS RACE/ETHNICITY NOT INCLUDED AS A WEIGHTED INDICATOR IN THE HEALTHY PLACES INDEX®?

Race and racism have been a primary driver that has shaped our regions, both creating places with profoundly unequal opportunities while dividing and segregating our communities. Furthermore, decades of research has also demonstrated the power of neighborhood environments and community conditions to shape our health outcomes. Looking specifically at the role of race and place – each observed as individual variables – for COVID-19 show stunning disparities in mortality by race/ethnicity and an equally stunning mortality by HPI quartile. A substantial amount of mortality could be avoided by addressing the social determinants of health, but race remains a significant contributor to mortality. For example, among the NHPI community there are much higher mortality rates than other groups over the three most disadvantaged quartiles. Determining what accounts for the high mortality rates in NHPI across the three most disadvantaged quartiles is critical and is enabled by maintaining the independence of race and place in the analysis of health data. Discrete drivers of health inequities would be obscured if race/ethnicity were added to a place-based index. The impact of structural racism on health outcomes is well documented and the root cause behind why we see differences in health outcomes by race in nearly every major measure of health status that we have. Because race and place both matter in addressing health inequities, it is important to look at them separately. The HPI approach, where race and ethnicity are classified as an independent variable, allows us to provide both strong and compelling evidence to address both race and place.

Including race and ethnicity in an index also has particular ramifications in California, which, since 1997, has prohibited state government from awarding contracts or grants based on race/ethnicity (Prop 209). This does not preclude the use of other metrics that might be more relevant to capture neighborhood risk though. For example, per capita income can be used instead of median household income, which addresses underestimating the socioeconomic needs of families living in large multifamily homes with several income earners.
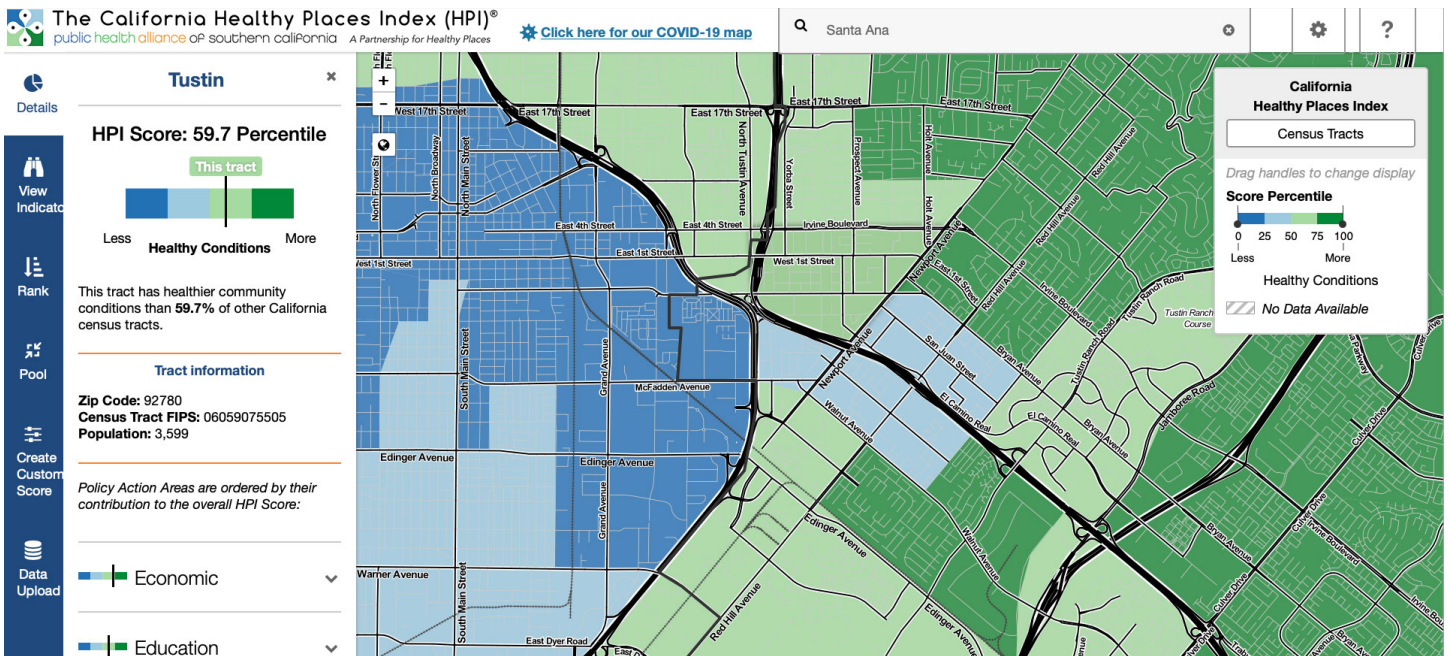
WHAT IS THE RECOMMENDED LEVEL OF GEOGRAPHY TO USE WITHIN HPI?

The Census tract is the recommended geography to use HPI, as it is the most granular level available in the platform. Applying HPI at this level helps to elevate important neighborhood variation in living conditions that can often be obscured when looking at higher geographies such as the ZIP code level. Larger geographies are likely to miss important heterogeneity in living conditions and health outcomes apparent at the Census tract level. When distributing resources at too high of a geography, the unintentional impact of exacerbating systemic inequities may occur.

ARE CERTAIN RACIAL/ETHNIC POPULATIONS UNDERREPRESENTED WITHIN HPI?

Because of longstanding inequities and structural racism, one would not expect to see equal distribution of various racial and ethnic populations between HPI quartiles. This explains why there is a smaller White population in the lowest HPI quartile than other racial and ethnic groups. The distribution of HPI scores for Whites skews towards more opportunity, which is consistent with structural racism that has favored the distribution of resources (economic, education, housing, transportation) to Whites

and White neighborhoods. For other groups there are different dynamics. When the balance of these forces shifts for a particular community, the distribution of resources and health status may shift as well. This interpretation may help contextualize findings of divergent skewing of HPI distributions towards more opportunity (Asian, Multiracial) or less opportunity (Latino, Black, Native Hawaiian Pacific Islander, American Indian/Alaskan Native).

The HPI developers strongly support efforts to improve the collection and reporting of disaggregated data on race and ethnicity, as well as additional data collection and analysis strategies focused on subpopulations.

DOES HPI USE ARTIFICIAL INTELLIGENCE ALGORITHMIC APPROACHES?

No, artificial intelligence algorithms such as neural networks played no role in the construction of the HPI, which shares many of the same indicators and methodologic contours as other place-based indicator projects that pre-date or were proposed to assess equity in the COVID-19 pandemic response. A description of the HPI methodology is provided in this peer reviewed journal article in Public Health Reports.