Transportation For All

Index Methodology

- We identified nine focus populations for our Transportation For All analysis – Black, Asian, Hispanic, youth (under 18), older adults (65 and over), disabled, low income, foreign-born, and limited English proficiency. We chose these groups based on their inclusion in Civil Rights Law and best practices from other MPOs. They are meant to represent those that have may have been marginalized by land use and transportation decision-making.

- For the race/ethnicity and age categories, we used 2020 Census data at the tract level. For other categories we used estimates for each focus population based on the American Community Survey's latest 5-year estimates. Using a census-recommended methodology, we found the standard error (SE) and coefficient of variation (CV) for every estimate and omitted all data that had a CV of 30 percent or higher (indicating poor data quality). Though the Census Bureau does not set a specific data quality threshold, we found the 30 percent CV value to be a reasonable benchmark. In two categories (Low Income and Limited English Proficiency) fewer than 50% of tracts met our data quality threshold. In those cases, we took estimates at the County Subdivision level (which includes cities and towns inclusive of any villages within their borders) and applied them to all tracts within that municipality. We lost some neighborhood-level variation with this method but captured some regional variation that would be lost if none of the data met our quality threshold.

- We then compared each population's percentage in each census tract to the county average and assigned each entry a score, as follows:
    - Less than or equal to the county average (or insufficient data quality): 0 points
    - Up to 5% above county average: 1 point
    - 5-10% above county average: 2 points
    - 10-20% above county average: 3 points
    - More than 20% above county average: 4 points

  This method differs slightly from the standard deviation method used by some other MPOs. We found that using standard deviations could result in equal weight being given to populations that have a far narrower data spread. For example, a tract with 4% more Asian residents than the county average could be assigned the same score as a tract with 20% more Black residents than the county average, simply because the number of Asian residents does not vary much between tracts. Our chosen method gives more weight to the tracts that show the greatest variation in whole percentage terms.

- We then summed the scores for each population group to determine the total score (or Vulnerability Index) for each tract.