*Changes to Geographic Boundaries*

Between 2000 and 2020, there have been multiple changes to the census tract boundaries across the country and within Franklinton. While the 2010 census tract boundaries are not preferable, as they have part of Upper Arlington and the North side of the Scioto River included in the boundaries of Franklinton census tracts, these are ultimately the easiest and most accessible way to match boundaries. Social Explorer, for instance, has put together its 2000 data into 2010 census tract boundaries. This process worked by using areal Longitudinal Tract Data Base (LTDB) interpolation weights, specifically areal- and population-based, along TIGER/Line shapefiles (Explorer n.d.). This process followed the lead of previous researchers that introduced a method of including areal and population based weights (Logan, Xu, and Stults 2014). Typical areal-weighted interpolation assumes population uniformity across a geography, thus an areal- and population-based interpolation technique is preferred since it does not make this assumption.

Additionally, the 2020 data has also been input into 2010 census tract boundaries from IPUMS and the National Historic Geographic Information Systems (NHGIS). Although the 2020 census tract boundaries match more closely with the “natural” borders of the neighborhood, I do not have the ability to input historical data into the 2020 census tract boundaries. However, they utilize a different interpolation technique using target-density weighting, which assumes that characteristics within each geography have proportional distributions based on another characteristic (Schroeder 2007).

<https://www.nhgis.org/time-series-tables#standardization>

<https://data2.nhgis.org/main>

**OTHER; Social Explorer Boundaries**

2020+2020 = 2010 Boundaries

43.01+43.02 = 43 (North)

50.01+50.02 = 50 (West)

43 = 43

**ESRI Census Corrections**

<https://www.esri.com/arcgis-blog/products/esri-demographics/analytics/esri-historical-demographic-data/>

<https://www.census.gov/programs-surveys/decennial-census/decade/2020/planning-management/process/disclosure-avoidance/differential-privacy.html>