

## **2022 Datathon Challenge: Redistrict Houston's City Council** **BakerRipley**

**Project Description:** As of 2020, there are 2,304,580 Houstonians, who are represented by 16 city council members. [Eleven are elected by voters within single-member districts](#) and five at-large members are elected by all city voters.

Prior to the 2023 election, the City of Houston will redraw the district maps based on the population changes that occurred between the 2010 and 2020 census. Since the 2010 census, the population of the City of Houston has grown by 205,129 people, a 9.8% increase.

Your challenge is to **create a redistricting map** for the City of Houston based on the 2020 census and changes in population since 2010. Your map can maintain the status-quo of 11 single-member districts or you may choose to increase or decrease the number of districts if needed to fulfill an equitable balance of power.

### **Objective:**

- Create a new **Houston Council District map** using census data from 2020 and changes in the population since 2010.
  - The map should contain an outline of the districts created (you may choose to keep the number of districts at 11 or increase/decrease the number of districts).
  - Your map needs to take into account the following **rules**:
    - The total variance in population is less than 10% across the precincts
    - Each district must have contiguous geographical boundaries
    - Compliance with Section 2 of the Voting Rights Act, prohibiting the denial of voting rights based on race/ethnicity and allows for the creation of minority-majority districts if needed to allow for a racial or language minority group to elect someone of their choice.
    - Maintain communities of interest, based on social, cultural, geographic, and economic interests as well as shared policy interests

### **Final Deliverable:**

1. **Map** outlining the new district
  - List of Census blocks used to create each district
2. **Chart/figure** that displays:
  - Total population and the voting age population of each district
    - Calculated variance of each from the *ideal* (population /# of districts)

- Race/ethnicity breakdown of each precinct (total population and voting age population)
  - Calculated variance from overall city race/ethnic demographics
- 3. **Chart/figure** that compares the **differences** between current and newly created districts:
  - Calculated deviation of total and voting age population
  - Race/ethnicity for total population and voting age population
- 4. **Explanations** for the following:
  - Why the # of districts to create was chosen
  - Decisions that led to differences in the race/ethnicity **across** districts
  - Decisions that led to specific breakdown of race/ethnicity **within** districts
- 5. Optional (only if time permits): Use other data from the Census Bureau to provide a chart with:
  - Socio-demographic characteristics of each district are (i.e., age, household income, poverty level, renter v. homeownership)

#### **Judging Criteria:**

- Map of Houston City Council districts with the new boundaries that meet minimum standards outlined above, including:
  - Lowest variance between the populations of the districts (total population and voting age population)
  - Compactness (shape) of districts
  - Variance in race/ethnicity within and across the districts
- While data is used in an attempt to make redistricting objective, much of the process and decisions made are very subjective. For this reason, judging will also take into account the following:
  - Explanations behind decisions to prioritize one criteria over another
  - Explanations for any variation in the racial/ethnic composition across the districts (if applicable)
  - Explanations for the number of districts created
  - Explanations for variation in socioeconomic status of the districts (if applicable)

**Data Sets:** The [Census Redistricting File Dataset](#) contains data down to the block level, including race and ethnicity for the total population and for the voting age population (those who are 18 and over). In addition, redistricting shape files can be [found here](#) from the Census Bureau.

- [This file](#) highlights the fields of interest to determine census blocks tied to the City of Houston and the race and ethnicity variables you should use for your analysis. Look for the yellow highlighted fields.
- [This file](#) provides summary information for the population and demographic breakdown of the council districts based on 2010 census data and summary data for the city in 2010 and 2020.

#### **Other Data Sources:**

- Current Houston City Council [shape file](#) can be found on the city's data hub as well as the shapefile for the voting precincts (if you want to look at election results for your analysis)
- [Previous County Election Results](#) Canvas Reports have the tabulated votes by voting precinct (note these correlate with the Voting Tabulation Districts, or VTDs, in the census files)
- [Census Data Web Portal](#) which can be used for the optional portion of the challenge to gather socioeconomic data

**Prize:** Air pods

#### **Additional Resources & Information:**

Redistricting is often met with conflict as it deals with the distribution of power within society. These arguments often come down to boundaries being drawn to favor one group and/or harm another. Specifically, [gerrymandering](#) leads to benefits for incumbents or one political party over another and often reduces the electoral power of people of color through cracking and packing groups of people.

Harris County recently went through their redistricting process and adopted new precinct maps following the 2020 census which includes large boundary changes to three precincts. The formal redistricting order for the county can be found [here](#) and [this link](#) provides some explanation for these concepts. These maps have been contentious and two current Commissioners and some voters have [sued Judge Hidalgo and the county](#) over the newly drawn maps.

More recently, [the Chronicle reported](#) that the League of United Latin American Citizens, LULAC, is taking action to address what they deem “gross underrepresentation of Latinos” on Houston’s City Council. Currently, there is only one Hispanic member while the city is 45% Hispanic. LULAC is seeking to change the composition of the city council by turning the at-large positions into single-member districts within largely Hispanic areas of the city.