

# How to Read Map Reports

Full reports from the Haystaq-created draft maps, as well as community-submitted district plans (through 10/12) can be found on the city website as Excel files. These reports were created by proprietary python code written by HaystaqDNA. Here is a basic primer on the components/tabs of these reports:

## **Maps:**

These are just images from the city's Districtr hosted website of each map.

## **Populations:**

When we create a plan or export a plan from Districtr, we export it as a 'block equivalency file'. Basically the U.S. Census divided all of the geography of the City of San Diego up into 'blocks'. At its most basic, a block can correspond to a city block, but the census will also use permanent geographic features (a waterway, a canyon, a ridge, a highway) to define a block. The census then published population and demographic data associated with each block (a P.L 94-171 file). Then the Statewide Database on behalf of the state of California takes that PL file and does prisoner reallocation and reassigns in-state prisoners back to their original blocks. To create the 'Populations' report we match up the blocks of each district with the blocks in this file and summarize all of the population within this district.

Defining some of the abbreviations: NL = non-Latino, AIAN=American Indian and Alaskan Native, VAP = Voting Age Population (age 18+), CVAP19 = 2019 Citizen Voting Age Population (an estimate of eligible voters).

Deviations are calculated against an ideal population of each district. To find the ideal population we simply divide the population of San Diego (1,389,899) by the number of districts(9) to find 154,433. The raw deviation is how far off this number a district population is. The final deviation number is found by adding the absolute value of the lowest negative deviation to the highest absolute value of the highest positive deviation. Example: District 9 has the lowest negative deviation of -3.06%. District 5 has the highest positive deviation of 2.80%. So the final deviation is  $3.06\% + 2.80\% = 5.86\%$

## **Components:**

The Component report is a list of all of the Community Planning Areas and Neighborhoods and their populations that make up a district.

## **OldDistrict:**

This report lists what existing city council districts and their populations make up the new proposed districts.

## **Compactness:**

For more information on the math behind compactness measures, here is a good resource: <https://fisherzachary.github.io/public/r-output.html>. For these tests, the closer the score is to 1, the more compact the district, and the closer to 0, the less compact the district is.

## **Splits**

There are two versions of the splits report. One that looks at how many districts each Community Planning Association is in and one that looks at how many districts each Neighborhood is in.

### **Community Splits:**

'Military Facilities', 'Reserve' and 'Not Identified' show up as splits, mostly because there are multiple areas with those names. They will show up as splits on almost every map.

Keep in mind physical geography when looking at neighborhood and CPA splits. For example, Los Penasquitos Canyon will show a 0 population split on some maps. This is because there is a very long and very narrow canyon that extends eastward from the community. It falls between Park Village and Mira Mesa and has 0 population. In many of the maps for reasons of compactness we will place this canyon in a different district than the area with residents.

### **Neighborhood Splits:**

Specifically regarding neighborhood splits: when we reduced the number of splits on the map we optimized for CPAs. Many times CPAs and Neighborhoods follow similar but not identical boundaries. Often the CPA will have its line on one side of a highway and the neighborhood the other. So there are 'many' neighborhoods that will show 0 population splits. We hold that in general you should ignore the 0 population splits.