

# New district lines. Five counties. One number that had to be right.

When California adopted a new configuration for the 8th Congressional District under AB 604 and Proposition 50, a congressional office needed a defensible demographic profile of a district that crossed five counties, contained some cities in full, split others between districts, and included unincorporated communities that no city roster would surface. Plavidian reconciled the adopted GIS boundary, Census geography, redistricting data, and official jurisdiction reports into a verified profile: 760,066 residents, 595,508 of voting age, 513,705 citizen voting age, reconciled to the official control total with the source tables' two-person discrepancy disclosed rather than smoothed away.

## CLIENT TYPE

**Congressional district office**

## GEOGRAPHY

**CA-08: portions of five California counties**

## CORE SERVICES

**GIS boundary control, split-city allocation, reconciliation**

## VERIFIED POPULATION

**760,066 residents, 274,218 housing units**

## The outcome

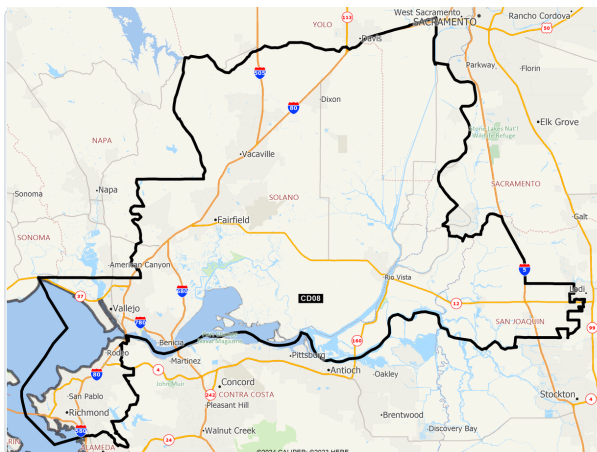
The office received a government-source demographic profile in which every number belongs to the adopted boundary: county portions from Solano's 447,857 (wholly contained) down to Sacramento's 3,167, split cities like Davis and Lodi counted only for their district-contained residents, unincorporated communities and county remainder areas retained so no resident disappears from the profile, and a jurisdiction table that reconciles to the official 760,066 control total, accompanied by a separate methodology memorandum so the analysis can be reviewed, repeated, and defended.

## THE CONTROLLING QUESTION

**The boundary decides. Everything else reports to it.**

## California Congressional District 8

AB 604 / Proposition 50 district configuration



### District snapshot

**760,066**

Total population

**595,508**

Voting-age population

**513,705**

Citizen voting-age population

**274,218**

Housing units

### Counties represented

- Solano entire county
- Contra Costa partial
- Sacramento partial
- San Joaquin partial
- Yolo partial

### Split cities

- Davis - 17.44% in district
- Lodi - 27.61% in district

Source: California Senate Office of Demographics; official AB 604 district map.  
District takes effect January 3, 2027. Map prepared for Plavidian case-study use.

District demographics look like a lookup until the lines move. The adopted CA-08 crossed Contra Costa, Sacramento, San Joaquin, Solano, and Yolo counties, and only Solano was wholly contained. Several cities that seemed geographically or historically associated with the district were not in it; others were split, so using a whole-city total would overstate the population the office actually represents. The governing rule Plavidian set at the start: the adopted district boundary, not a ZIP code, county line, prior configuration, or assumed city list, controls every calculation.

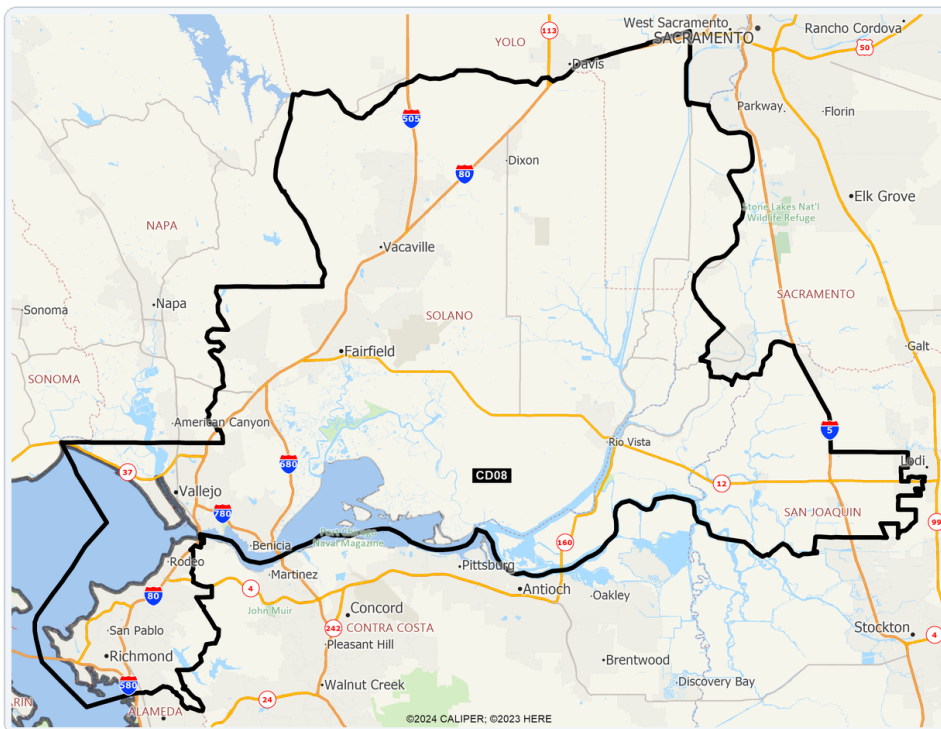
That rule corrected real assumptions. Vacaville verified as wholly within the district; Davis and Lodi verified as split, contributing only their district-contained portions; Antioch, Martinez, and Pittsburg, plausible inclusions on a casual map read, verified as outside the district entirely.

## THE RECONCILIATION

### Five sources, one control total

## CA-08 Geographic and Demographic Overview

Verified AB 604 / Proposition 50 boundary and district-contained population



### County portions in CA-08

|                     |         |         |
|---------------------|---------|---------|
| <b>Solano</b>       | 447,857 | 100.00% |
| <b>Contra Costa</b> | 273,006 | 23.37%  |
| <b>San Joaquin</b>  | 21,260  | 2.74%   |
| <b>Yolo</b>         | 14,774  | 6.81%   |
| <b>Sacramento</b>   | 3,167   | 0.20%   |

### Key jurisdiction findings

- Vacaville is wholly within CA-08.
- Davis and Lodi are split jurisdictions.
- Antioch, Martinez, and Pittsburg are outside CA-08.
- Unincorporated communities and county remainder areas are included.

### Verified measures

|                    |                |
|--------------------|----------------|
| Population         | <b>760,066</b> |
| Voting age         | <b>595,508</b> |
| Citizen voting age | <b>513,705</b> |
| Housing units      | <b>274,218</b> |

### Methodology note

The adopted congressional boundary controls all calculations. District-contained city, county, community, and remainder-area populations were reconciled against the official district total. The published place subtotal differs from the official total by two persons; the discrepancy was documented rather than manually reassigned.

Sources: California Senate Office of Demographics; UC Berkeley Statewide Database; U.S. Census Bureau.

No single dataset answers a redistricting question. The official district shapefile defined the legal boundary; Census TIGER/Line and 2020 block geography supplied the population units; Public Law 94-171 redistricting data carried population and race; Statewide Database city-split reports settled municipal containment; and the official district profile supplied the control totals everything had to reconcile against. Plavidian treated district geography as primary and municipal geography as a reporting layer, which is what keeps a split city from being double-counted or a county remainder area from vanishing.

The reconciliation surfaced a two-person difference between the published jurisdiction line items (760,064) and the official district total (760,066). Plavidian disclosed it instead of silently adjusting a component to force agreement: a documented source-table discrepancy is defensible, and an unsupported edit to an official figure is not.

## WHAT THE NUMBERS ARE FOR

### Three populations, three different questions

The profile reports total population, voting-age population, and citizen voting-age population separately because they answer different questions: total population drives constituent services, infrastructure, and housing work; voting-age population counts all adults; citizen voting-age population matters for representation and language-access review. Reporting all three, with race and ethnicity at each level where the sources support it, keeps the office from applying one measure to a purpose it was never designed for. A separate methodology memorandum documents the sources, allocation rules, validation steps, and limitations, and states plainly what the report is not: voter registration, turnout, or campaign targeting.

## THE DELIVERABLE

### A five-page memo built to be checked

#### Verified Population by Jurisdiction / Place Within CA-08

The following table uses district-contained place counts. C = incorporated city, U = unincorporated census-designated place/community, R = county remainder area not assigned to a listed city or CDP.

| County       | Jurisdiction / Place          | Population in CA-08 | Percent of Place in CA-08 |
|--------------|-------------------------------|---------------------|---------------------------|
| Contra Costa | Bayview (U)                   | 1,786               | 100.00%                   |
| Contra Costa | Crockett (U)                  | 1,240               | 38.14%                    |
| Contra Costa | East Richmond Heights (U)     | 3,463               | 100.00%                   |
| Contra Costa | El Cerrito (C)                | 26,000              | 100.00%                   |
| Contra Costa | El Solbrante (U)              | 15,547              | 100.00%                   |
| Contra Costa | Hercules (C)                  | 26,053              | 100.00%                   |
| Contra Costa | Kensington (U)                | 5,435               | 100.00%                   |
| Contra Costa | Montalvin Manor (U)           | 3,113               | 100.00%                   |
| Contra Costa | North Richmond (U)            | 4,191               | 100.00%                   |
| Contra Costa | Pinole (C)                    | 19,058              | 100.00%                   |
| Contra Costa | Richmond (C)                  | 116,790             | 100.00%                   |
| Contra Costa | Rodeo (U)                     | 9,678               | 100.00%                   |
| Contra Costa | Rollingwood (U)               | 3,019               | 100.00%                   |
| Contra Costa | San Pablo (C)                 | 32,220              | 100.00%                   |
| Contra Costa | Tara Hills (U)                | 5,378               | 100.00%                   |
| Contra Costa | Remainder of Contra Costa (R) | 35                  | 0.33%                     |
| Sacramento   | Isleton (C)                   | 802                 | 100.00%                   |
| Sacramento   | Remainder of Sacramento (R)   | 2,365               | 15.71%                    |
| San Joaquin  | Lodi (C)                      | 18,382              | 27.61%                    |
| San Joaquin  | Terminous (U)                 | 430                 | 100.00%                   |
| San Joaquin  | Remainder of San Joaquin (R)  | 2,448               | 3.54%                     |
| Solano       | Allendale (U)                 | 1,652               | 100.00%                   |
| Solano       | Benicia (C)                   | 27,167              | 100.00%                   |
| Solano       | Dixon (C)                     | 19,013              | 100.00%                   |
| Solano       | Elmira (U)                    | 194                 | 100.00%                   |
| Solano       | Fairfield (C)                 | 120,178             | 100.00%                   |
| Solano       | Green Valley (U)              | 1,658               | 100.00%                   |
| Solano       | Hartley (U)                   | 2,436               | 100.00%                   |
| Solano       | Rio Vista (C)                 | 10,017              | 100.00%                   |
| Solano       | Suisun City (C)               | 29,591              | 100.00%                   |
| Solano       | Vacaville (C)                 | 95,941              | 100.00%                   |
| Solano       | Vallejo (C)                   | 126,494             | 100.00%                   |
| Solano       | Remainder of Solano (R)       | 13,516              | 100.00%                   |
| Yolo         | Clarksburg (U)                | 402                 | 100.00%                   |
| Yolo         | Davis (C)                     | 11,674              | 17.44%                    |
| Yolo         | El Macero (U)                 | 1,074               | 100.00%                   |
| Yolo         | Remainder of Yolo (R)         | 1,624               | 19.64%                    |

The delivered product is a five-page memorandum, and its density is the point. The jurisdiction table above lists all 37 district-contained places, incorporated cities, unincorporated communities, and county remainder areas, each with its population and its containment percentage, so a staffer can see at a glance that Crockett is 38.14% in the district while El Cerrito is wholly contained. Race and ethnicity are reported at three population levels: total, voting age, and citizen voting age. Every figure names its source, Senate Office of Demographics, the Statewide Database city-splits report, Census PL 94-171, and the memo closes with the full methodology, limitations, and a plain statement of what the report is not for. Nothing in it asks to be taken on faith.

## WHY IT GENERALIZES

## Any custom boundary, same discipline

The method applies wherever an office or agency needs a defensible profile of a geography that no published table matches: legislative and council districts, school and utility districts, service territories, grant zones, emergency-planning regions. Begin with the controlling legal boundary, integrate the smallest reliable population geography, verify every jurisdiction intersection, and reconcile the result to an authoritative control total. Accurate district demographics require more than finding population numbers; they require verifying that every number belongs to the correct boundary.

## RESULTS

## By the numbers

**760,066**verified district population,  
reconciled to the official total**513,705**citizen voting-age residents,  
reported separately by design**5**counties reconciled; only one  
wholly contained**±2**person source discrepancy  
disclosed, not smoothed away

A newly configured district is a collection of maps, tables, shapefiles, and split-jurisdiction reports until someone reconciles them. Plavidian converted that landscape into a planning resource the office can defend: every jurisdiction verified, every partial city allocated, every resident counted once, and the whole reconciled to the number that controls.

**Complex data should not become production risk.**Request a data & mailing consultation: [www.plavidian.com/request-a-quote](http://www.plavidian.com/request-a-quote) · (760) 666-3130