



REDISTRICTING DATA RESOURCES

Orange County Registrar of Voters
Technical Redistricting Academy

www.ocvote.com/academy

July 28, 2021

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Acronyms

- ❑ ACS- American Community Survey
- ❑ CDR- Center for Demographic Research
- ❑ CVAP- Citizen Voting Age Population
- ❑ DOF- California State Department of Finance
- ❑ ESRI- GIS mapping software company
- ❑ GIS- Geographic Information Systems (i.e., mapping software)
- ❑ NHGIS- National Historical Geographic Information System
- ❑ P.L. 94-171- Public Law 94-171
- ❑ ROV- Registrar of Voters
- ❑ SCDC/SDC- California State Data Center (state affiliate of U.S. Census Bureau)
- ❑ SWDB- California Statewide Database
- ❑ USCB- United States Census Bureau



CDR Sponsorship and Administration

- The Center for Demographic Research (CDR) was established in 1996 to ensure Orange County continues its presence in the development and support of demographic information. The CDR activities are located at California State University, Fullerton, ensuring data consistency through the maintenance of a centralized data source of Orange County demographic characteristics.

CDR Sponsors



Contributing Partner:



Apportionment vs. Redistricting

□ What is apportionment?

- Process of determining the number of representatives in Congress
- Each state's representation in the U. S. House of Representatives is based on the decennial census.
- Per U.S. Constitution (Article 1, Section 2), apportionment of the House of Representatives determined by national census once every 10 years
- U.S. Census Bureau delivers apportionment results to President and Congress by December 31 of the census year

□ What is redistricting?

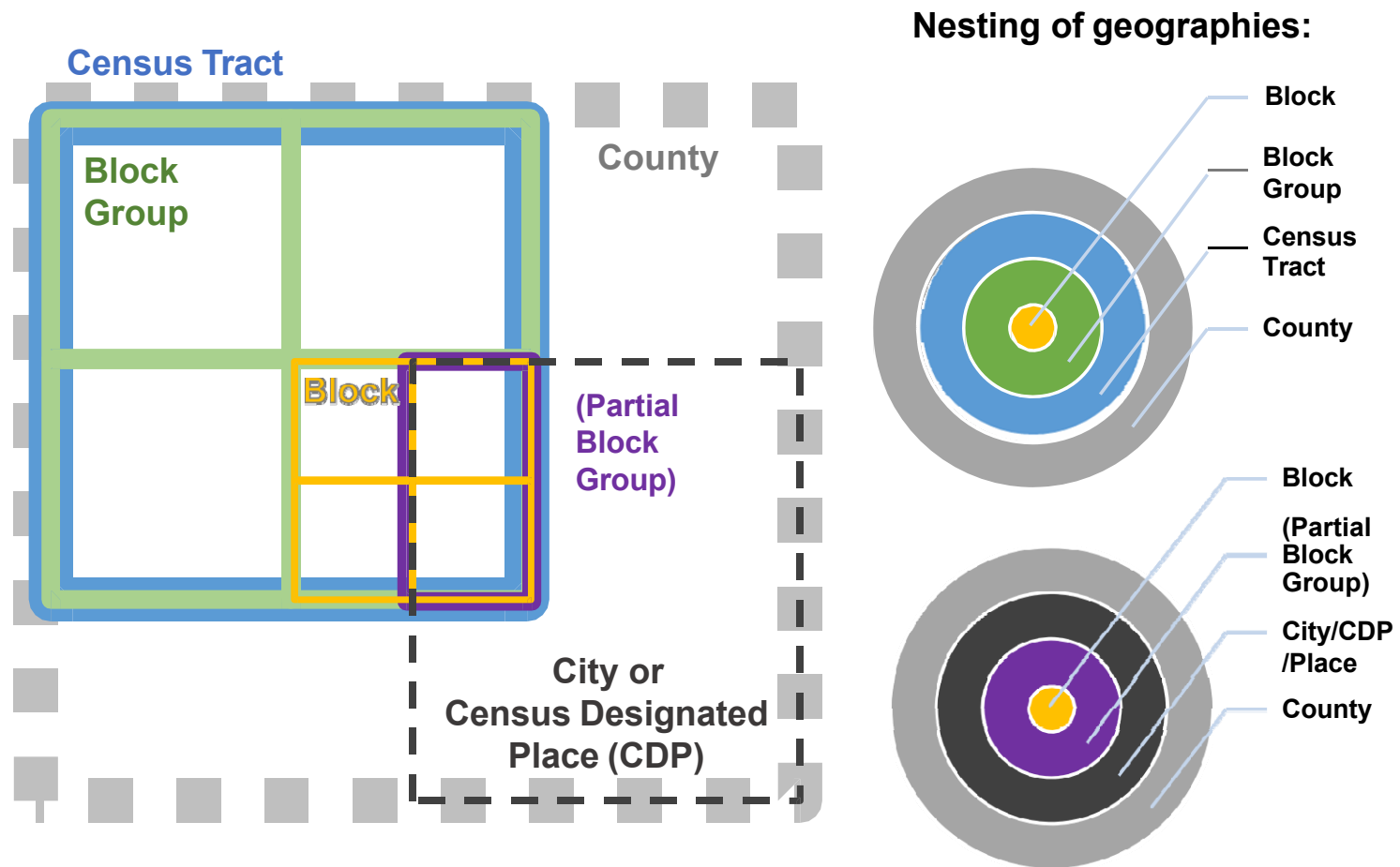
- Redistricting is the redrawing of boundaries for areas used to determine where people elect their representatives, such as:
 - U.S. House of Representatives
 - State legislature
 - County or city council
 - School board
- Law (Public Law 94-171) requires the redistricting data be delivered to state officials within one year of Census Day or no later than April 1



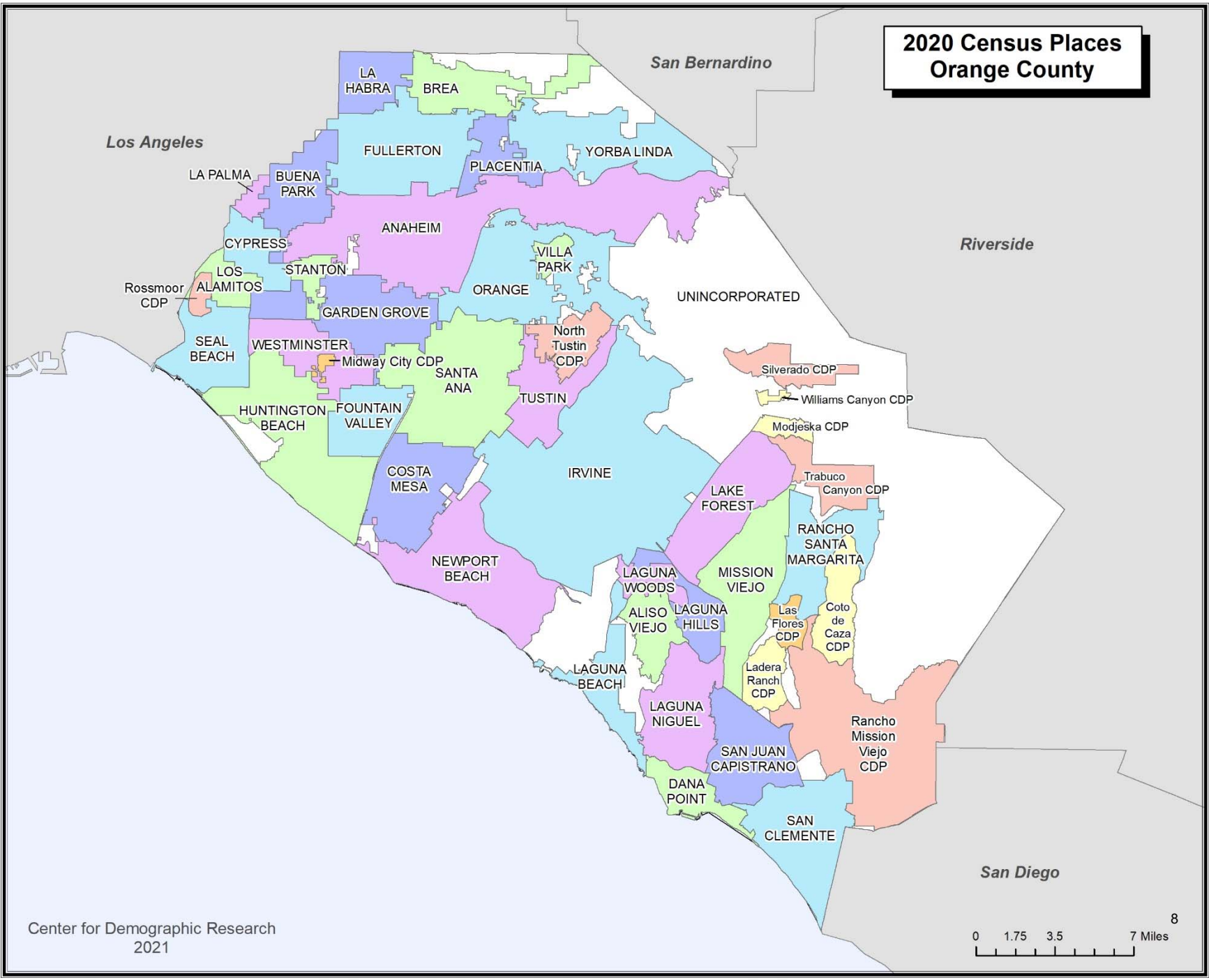
Apportionment vs. Redistricting Data

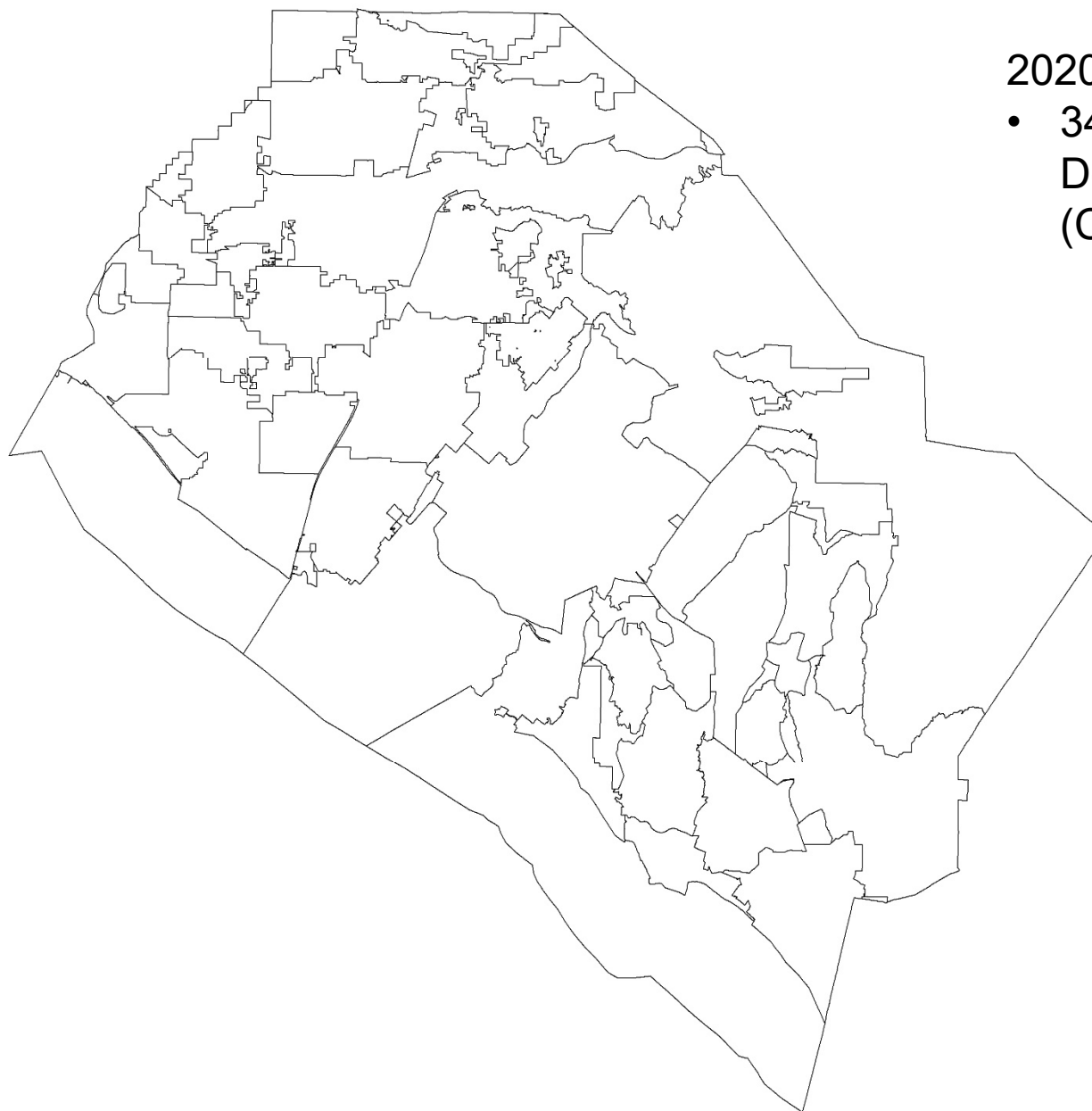
		Congressional Apportionment	Redistricting
Geography	Largest	State	State
	Smallest	State	Census Block
Who is counted?		Residential Population plus Federally Affiliated Count Overseas	Residential Population only
What is reported?		Total Population only	Race, ethnicity, and select housing characteristics
Current Timeline		Released April 26, 2021	Legacy Format- <u>by</u> August 16, 2021
			DVDs/Flash Drives & data.census.gov <u>by</u> September 30, 2021

Census Geography Hierarchy



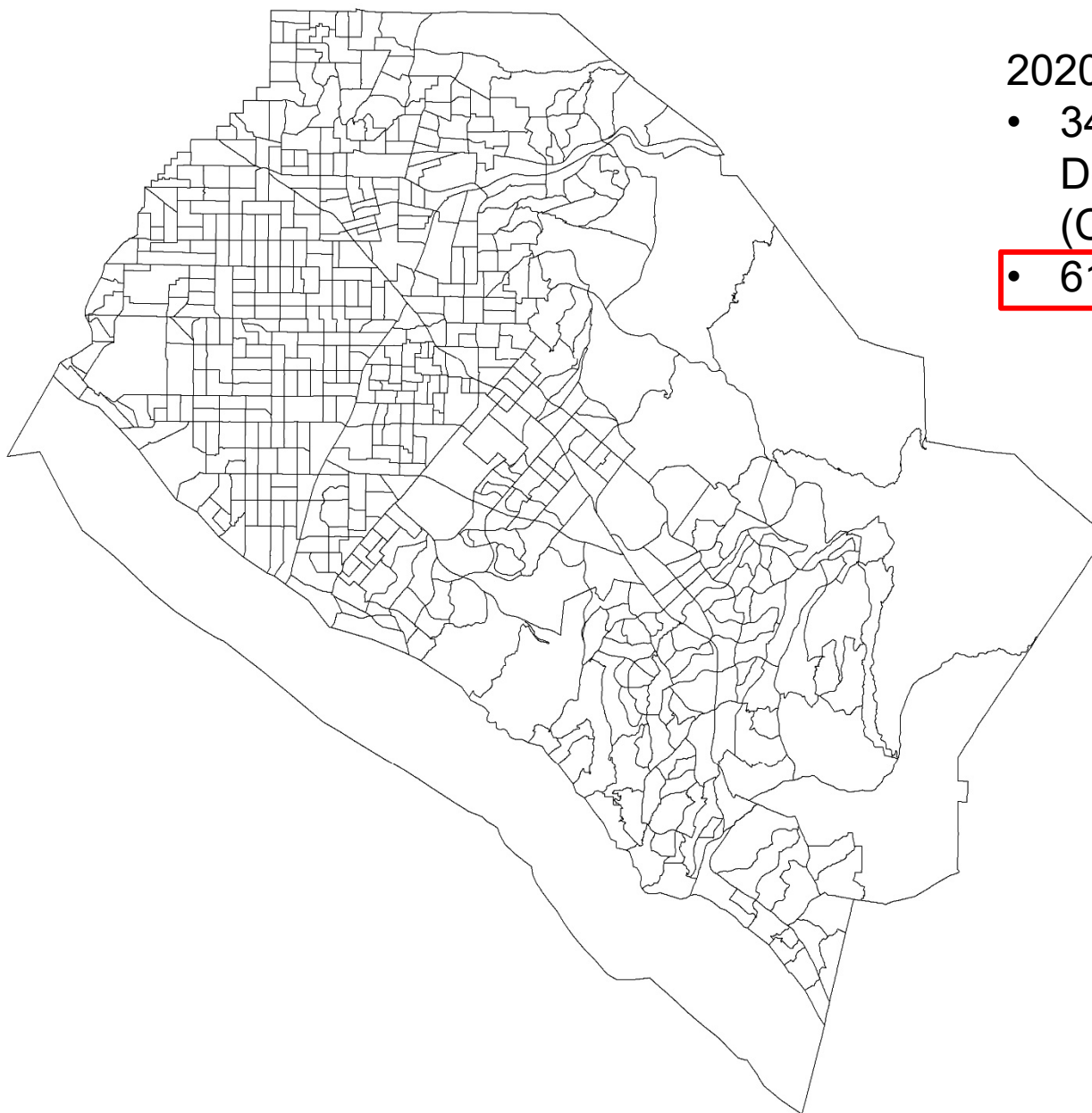
2020 Census Places Orange County





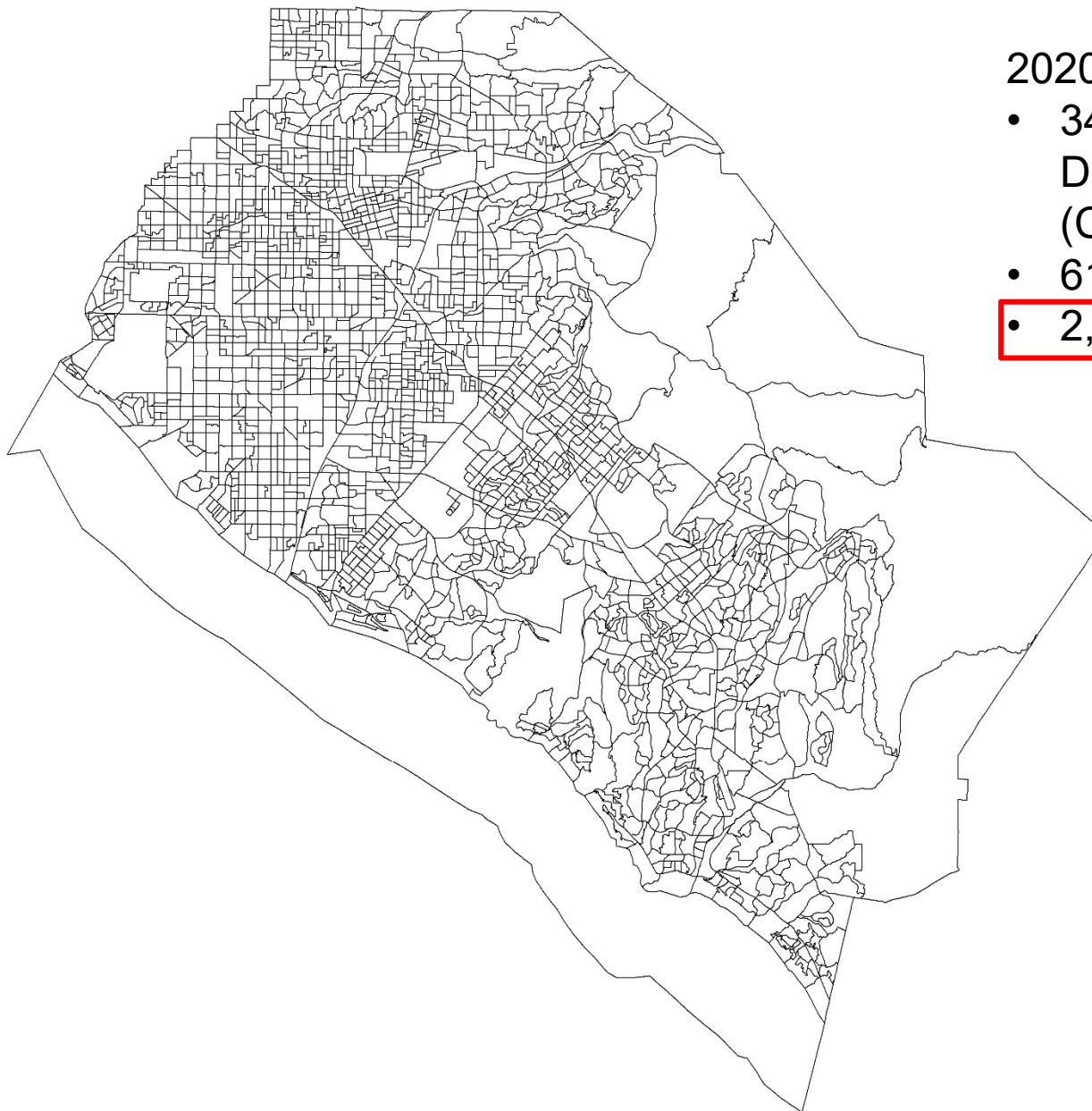
2020 Census:

- **34 cities & 11 Census Designated Places (CDPs)**



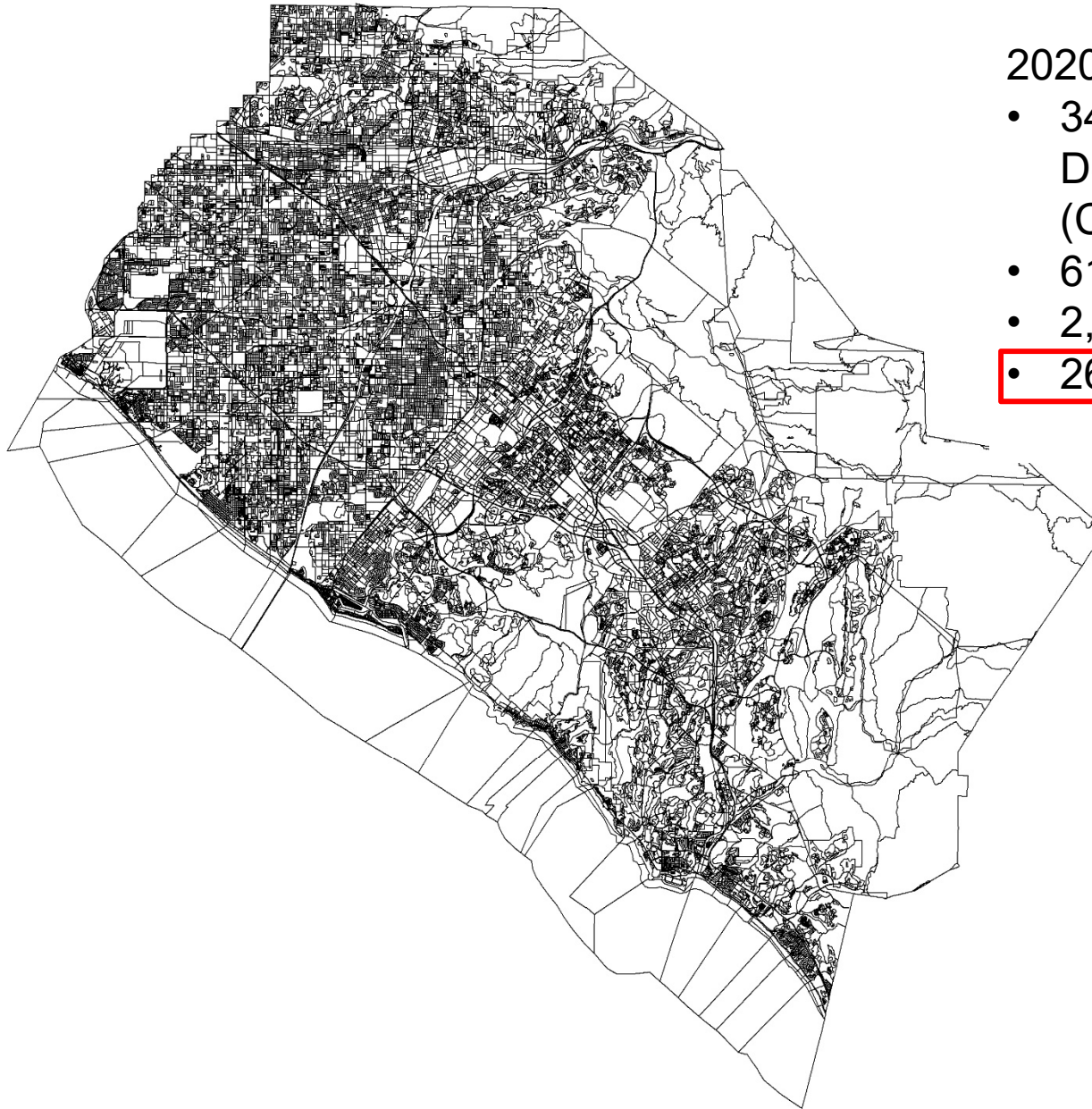
2020 Census:

- 34 cities & 11 Census Designated Places (CDPs)
- 614 census tracts



2020 Census:

- 34 cities & 11 Census Designated Places (CDPs)
- 614 census tracts
- 2,049 block groups

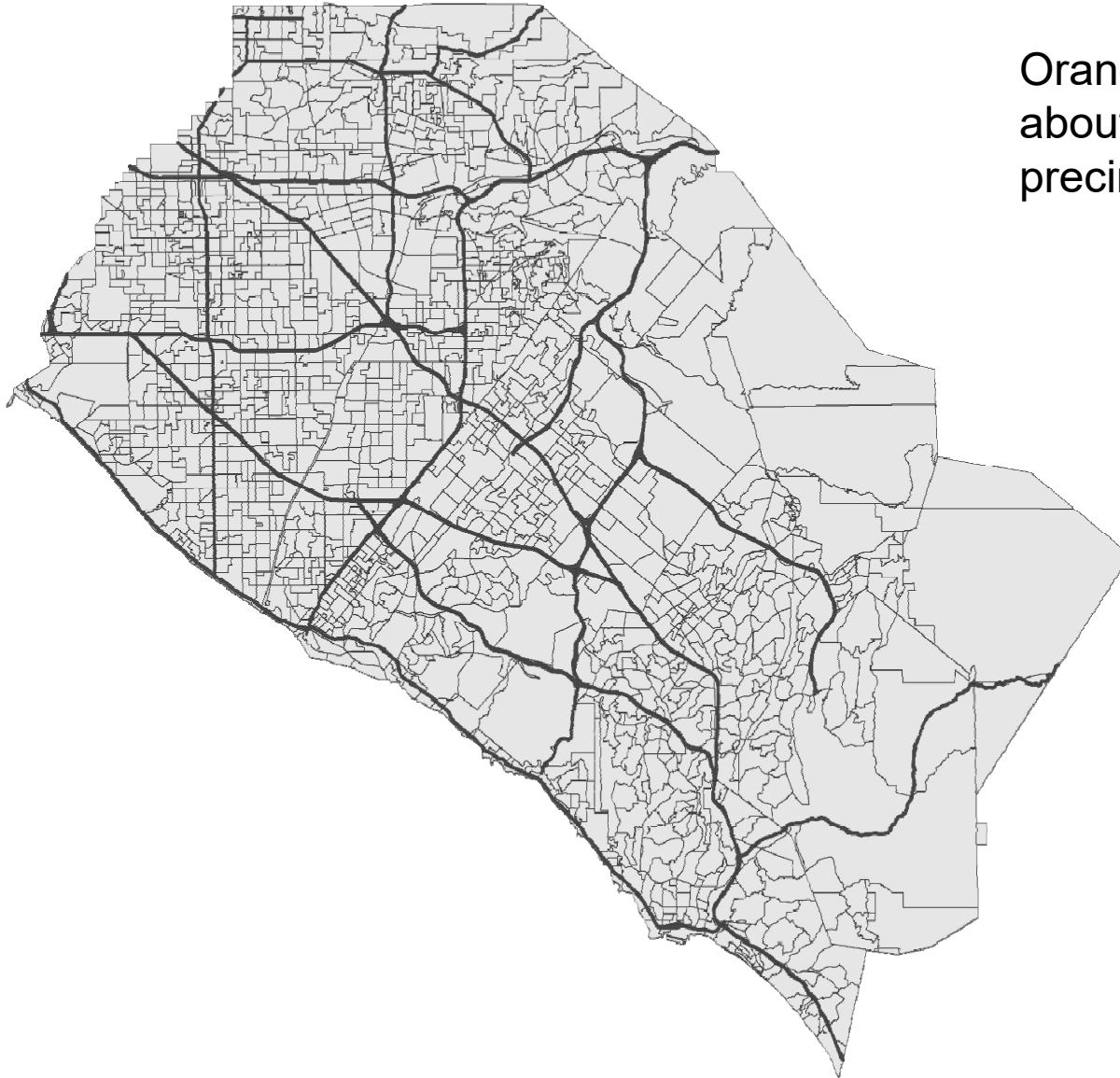


2020 Census:

- 34 cities & 11 Census Designated Places (CDPs)
- 614 census tracts
- 2,049 block groups
- 26,734 census blocks



Orange County has
about 1,800 voting
precincts





U.S. Census Bureau Redistricting Data Program

- Redistricting Data Program
 - <https://www.census.gov/rdo>
 - Decennial Census P.L. 94-171 Redistricting Data Summary Files
- Data not available yet. Status & additional information at:
<https://www.census.gov/programs-surveys/decennial-census/about/rdo/summary-files.2020.html>
- Redistricting Data Program Management
 - <https://www.census.gov/programs-surveys/decennial-census/about/rdo/program-management.html>



U.S. Census Bureau P.L. 94-171

What's in the file?

- ❑ Total Population (includes both household and group quarters population)
 - Total population by race
 - Total population by race & ethnicity (breaks out Hispanic or Latino)
 - Total population age 18 years and over by race
 - Total population age 18 years and over by race & ethnicity (breaks out Hispanic or Latino)
- ❑ Housing units (occupied and vacant)
- ❑ Group quarters population



U.S. Census Bureau P.L. 94-171

What's in the file? Population Types

- Race
 - White
 - Black or African American
 - American Indian and Alaska Native
 - Asian
 - Native Hawaiian and Other Pacific Islander
 - Some Other Race
 - Combinations of two or more races
- Ethnicity
 - Hispanic or Latino of any race
- Group quarters
 - Institutionalized:
 - Correctional facilities for adults
 - Juvenile facilities
 - Nursing facilities/Skilled-nursing facilities
 - Other institutional facilities
 - Noninstitutional:
 - College/University student housing
 - Military quarters
 - Other noninstitutional facilities



U.S. Census Bureau data.census.gov

- ❑ <https://data.census.gov/>
- ❑ Wide variety of socioeconomic data
 - Population, housing, employment
- ❑ Variety of geographic levels
 - Census geographies: block, block group, census tract, places
 - Cities, school districts, zip code, legislative districts...
- ❑ Click on “Advanced search” link for more detailed information and geographic levels
- ❑ Data training and informational webinars
 - <https://www.census.gov/data/academy.html>

Citizen Voting Age Population (CVAP)

- ❑ Calculated from U.S. Census Bureau's American Community Survey (ACS)
 - Monthly household sample survey across the nation
- ❑ 5-Year Estimates
 - Data collected over five-year period
 - Will not match counts from 2010 Census
- ❑ Census Block Group level
- ❑ Estimated population by race/ethnicity of U.S. citizens age 18 and over
 - Population eligible to vote
- ❑ Available on U.S. Census Bureau website
 - <https://www.census.gov/programs-surveys/decennial-census/about/voting-rights/cvap.html>



State Department of Finance

State Census Data Center (SCDC)

- ❑ California State Census Data Center (SCDC)
 - https://www.dof.ca.gov/Forecasting/Demographics/State_Census_Data_Center/
- ❑ Serves as central point for dissemination of census data in California
- ❑ SCDC program was instituted by U.S. Census Bureau to increase and improve public access to census data products
- ❑ Provides services to state and local government agencies and general public
- ❑ Processes machine-readable data files; prepares customized reports; and provides user consultation, data analysis, mapping, and training workshops upon request
- ❑ Library houses publications and maps from decennial censuses, American Community Survey, Current Population Survey, and other special and periodic surveys
- ❑ SCDC local network is composed of 5 regional and 36 affiliate centers located throughout the State. Working with the SCDC, regional and affiliate centers provide census-related products and services to the 58 California counties
 - CDR is an affiliate center



State Department of Finance 2020 Census Page

- <https://www.dof.ca.gov/Forecasting/Demographics/>
- California State Department of Finance (DOF) 2020 Census page
 - https://www.dof.ca.gov/Forecasting/Demographics/2020_census/
 - Important Dates
 - Apportionment and Redistricting Data
 - Count Question Resolution
 - Protecting Privacy - Disclosure Avoidance
 - 2020 Census Data Evaluation
 - California Complete Count



Statewide Database

- ❑ <https://statewidedatabase.org/>
- ❑ California's redistricting database
- ❑ Responsible for collecting and processing data for California's decennial redistricting
 - Including the modified dataset required in California that incorporates the redistribution of incarcerated persons after the 2020 Census P.L. 94-171 Redistricting Data file is released
 - ❑ Estimated arrival: ~30 days after P.L. 94-171 Legacy format is released
- ❑ Continually collect and process data between decennial redistricting efforts
- ❑ Publish precinct-level datasets and resources published after each election
- ❑ Data in table and GIS-useable formats

Other Online Data

- Esri's Living Atlas of the World
<https://livingatlas.arcgis.com>
<https://livingatlas.arcgis.com/en/browse/#d=1&q=ACS>
<https://livingatlas.arcgis.com/en/browse/#d=2&type=maps>
- NHGIS
<https://www.nhgis.org/>
- County of Orange – Open GIS Data
<https://data-ocpw.opendata.arcgis.com/>
- Links to other data sites
<http://www.fullerton.edu/cdr/links/>

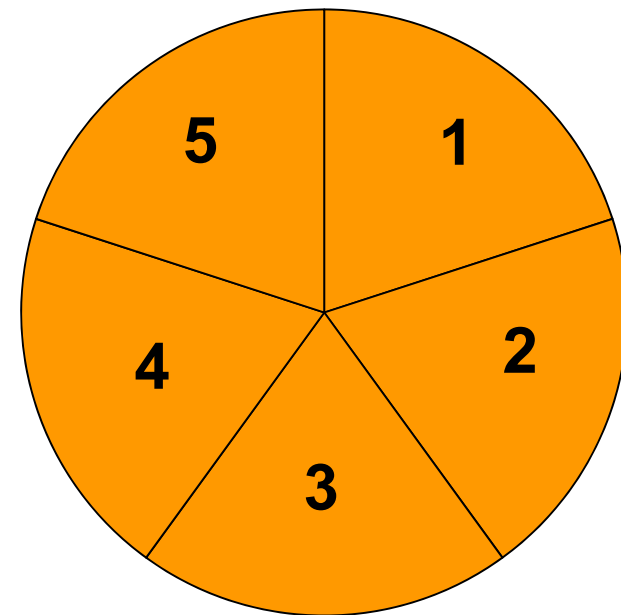
Data Timelines

Dataset	Agency Responsible	Normal Timeline	2021/Pandemic-Modified Timeline
Apportionment totals	Census Bureau	By December 31	April 26, 2021 (Actual)
P.L. 94-171 Redistricting Data file	Census Bureau	By April 1	Expected online: Legacy format: by August 16, 2021 Standard format: by September 30, 2021
California's required redistricting data file: P.L. 94-171 Redistricting Data file adjusted for the incarcerated population	Statewide Database	+30 days after standard P.L. is released (~April 30)	+30 days after P.L. Legacy format is released (~end September 2021) Note: Legacy format requires additional processing. California State Census Data Center will process and post data about a week of the legacy format release: Excel files with data for California, counties, places, and census tracts https://www.dof.ca.gov/Forecasting/Demographics/2020_census/

Goal is Equal Population Based on Decennial Census Data



Total Population / # of Board Members = Target Population



$$500,000 / 5 = 100,000$$

Target Population= 100,000

Differences with Target District Population

Hypothetical Deviations

Example

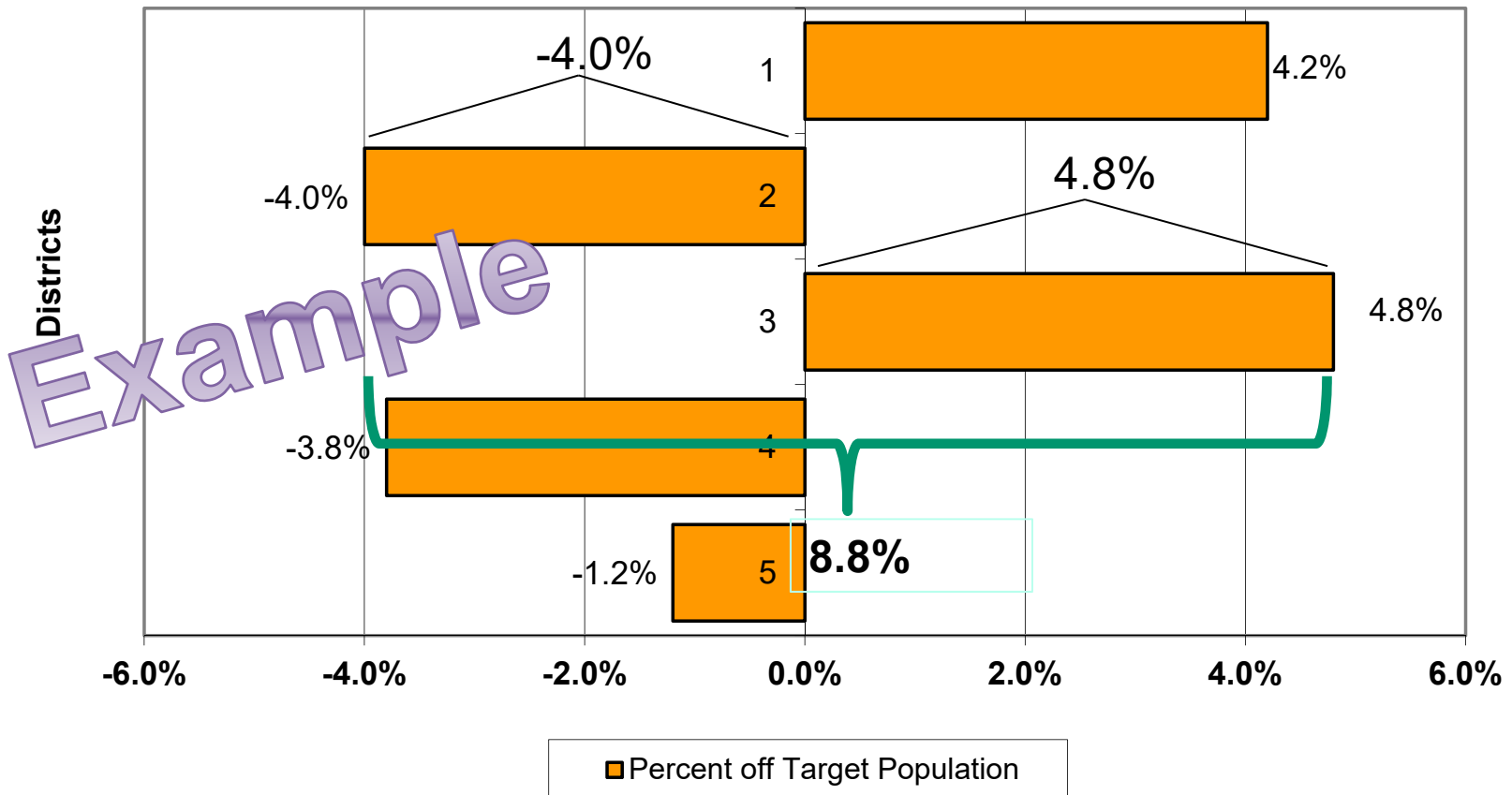
District	Total 2020 Population	Difference from Target 2020 Population	
		Number	Percentage
1	104,200	4,200	4.2%
2	96,000	-4,000	-4.0%
3	104,800	4,800	4.8%
4	96,200	-3,800	-3.8%
5	98,800	-1,200	-1.2%

Target District Population= 100,000

Differences with Target District Population

Hypothetical Deviations

$$|-4.0\%| + |4.8\%| \longrightarrow 4.0\% + 4.8\% = 8.8\%$$



Examples of Other Factors That May Be Considered

- ❑ Natural or built features: freeways, major roads, rivers, hills, mountains.
- ❑ Cities, neighborhoods, special districts, school districts, school attendance boundaries
- ❑ Special zones or district sub-areas (entertainment zone, downtown, college, historic)
- ❑ Areas with similar or common interests, issues or socio-economic characteristics (legislative, education, housing)

Finding Out More

- ❑ Visit redistricting websites & get on the email distribution lists:
- ❑ 2020 California Citizens Redistricting Commission
 - <https://www.wedrawthelinesca.org/>
 - https://www.wedrawthelinesca.org/sign_up
- ❑ County of Orange
 - <https://cob.ocgov.com/2021-redistricting>
 - redistricting@ocgov.com
- ❑ Orange County Registrar of Voters
 - <https://www.ocvote.com/>
 - <https://www.youtube.com/user/ocrov>
- ❑ Counties, cities, school districts, special districts...
- ❑ National Conference of State Legislatures
 - <https://www.ncsl.org/research/redistricting.aspx>

Available Resources

Presented by

Rebecca Lee, Training & Special Projects Manager



AB 849 – FAIR MAPS Act

Elections Code section 21508(j) of the FAIR MAPS Act requires the SOS to:

- Publish on the internet templates explaining the county and city redistricting processes
- The templates must be in all of the languages into which ballots are required to be translated in the state pursuant to Section 203 of the federal Voting Rights Act (VRA)
- The templates shall be published in a conspicuous location on the Secretary of State's internet website.

<https://www.sos.ca.gov/elections/helpful-resources/redistricting>



AB 849 – FAIR MAPS Act

The Secretary of State has created four templates:

City Council Redistricting Template

- [English \(PDF\)](#)
- [Spanish \(PDF\)](#)
- [Chinese \(PDF\)](#)
- [Hindi \(PDF\)](#)
- [Japanese \(PDF\)](#)
- [Korean \(PDF\)](#)
- [Khmer \(PDF\)](#)
- [Tagalog \(PDF\)](#)
- [Thai \(PDF\)](#)
- [Vietnamese \(PDF\)](#)

City Redistricting Commission Template

- [English \(PDF\)](#)
- [Spanish \(PDF\)](#)
- [Chinese \(PDF\)](#)
- [Hindi \(PDF\)](#)
- [Japanese \(PDF\)](#)
- [Korean \(PDF\)](#)
- [Khmer \(PDF\)](#)
- [Tagalog \(PDF\)](#)
- [Thai \(PDF\)](#)
- [Vietnamese \(PDF\)](#)

County Board of Sups Redistricting Template

- [English \(PDF\)](#)
- [Spanish \(PDF\)](#)
- [Chinese \(PDF\)](#)
- [Hindi \(PDF\)](#)
- [Japanese \(PDF\)](#)
- [Korean \(PDF\)](#)
- [Khmer \(PDF\)](#)
- [Tagalog \(PDF\)](#)
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- [Vietnamese \(PDF\)](#)

County Redistricting Commission Template

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- [Thai \(PDF\)](#)
- [Vietnamese \(PDF\)](#)



AB 849 – FAIR MAPS Act

Elections Code section 21608(h) of the FAIR MAPS Act requires the Secretary of State to post the applicable languages for each city in a conspicuous location on the Secretary of State's internet website.

For purposes of this section, “applicable language” means any language that is spoken by a group of city residents with limited English proficiency who constitute 3 percent or more of the city's total population over four years of age for whom language can be determined.



AB 849 – FAIR MAPS Act

SOURCE: U.S. Census Bureau- American Community Survey 2015 through 2019

CITY	LANGUAGE REQUIREMENT/APPLICABLE LANGUAGE (S)
Acton	Unincorporated area; County's language requirements, if any, apply.
Adelanto	Spanish
Agoura Hills	N/A
Alameda	Chinese (incl. Mandarin, Cantonese)
Alamo	Unincorporated area; County's language requirements, if any, apply.
Albany	N/A
Alhambra	Chinese (incl. Mandarin, Cantonese) Spanish
Aliso Viejo	N/A
Alondra Park	Unincorporated area; County's language requirements, if any, apply.
Alpine	Unincorporated area; County's language requirements, if any, apply.
Alta Sierra	Unincorporated area; County's language requirements, if any, apply.
Altadena	Unincorporated area; County's language requirements, if any, apply.
Alum Rock	Unincorporated area; County's language requirements, if any, apply.
American Canyon	Spanish Tagalog (incl. Filipino)
Anaheim	Spanish



Address Verification Process

The Registrar of Voters utilizes an address verification process to check all addresses on file against other resources.

Addresses in our election management database will be verified against records managed by 911 Sherriff, Parcel, OCFA, USPS, Google Earth Pro Street, or local city GIS departments.

In an election cycle, our office conducts monthly or weekly checks to verify the address Lat/Long Precinct to the Master Precinct Map.



Geocoding Addresses





Map Request

<https://ocvote.com/mapping/map-ordering-tool>

Data can be requested through the Registrar of Voters website, at the counter, by email, or over the phone.

**ORANGE COUNTY - REGISTRAR OF VOTER
REQUEST FOR MAPS/GIS**
REQUEST TYPE OF MAP

Type: Website Internal Front Desk Phone/Email Order Number: _____

MAP DATA

CONGRESSIONAL BOUNDARIES

Countywide
 38th Congressional
 39th Congressional
 45th Congressional
 46th Congressional
 47th Congressional
 49th Congressional
 49th Congressional

STATE SENATE BOUNDARIES

Countywide
 29th State Senate
 32nd State Senate
 34th State Senate
 36th State Senate
 37th State Senate

ASSEMBLY BOUNDARIES

Countywide
 55th Assembly
 65th Assembly
 68th Assembly
 69th Assembly
 72nd Assembly
 73rd Assembly
 74th Assembly

CHOOSE FORMAT

MAP SIZE
(Charge \$10.34 Per Map)
 36 inches
 24 inches
 Other
Specify: _____

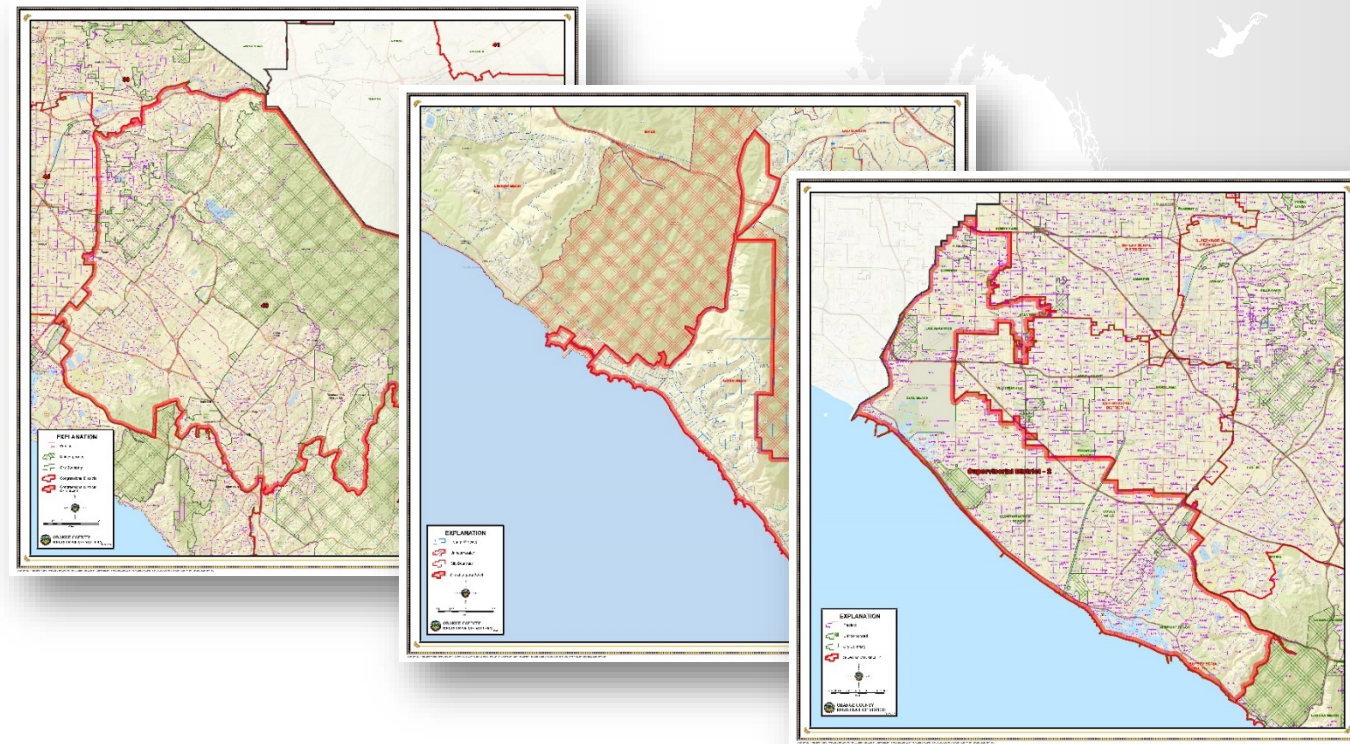
CHOOSE FORMAT
(No Charge per Map)
 ELECTRONIC
[pdf format
[Map emailed
[Free]
Specify: _____

PRINTED
 Pickup
 Mailed
[Additional \$7.18]
Specify: _____

Specific map requested: _____

Include district boundaries for: _____

Form Request_Maps_GIS_Rev_3/17_2016 v5.000 April 11, 2016





Map Ordering Tool

Map Ordering Tool

Choose one or more district boundary layers:

- City boundaries
- Congressional boundaries
- Senate boundaries
- Assembly boundaries
- Supervisorial boundaries
- School boundaries

Would you like the map to be a countywide map, or a map of a specific district?:

Choose

Choose one or more additional layers:

- Precinct boundaries
- City boundaries
- Freeway layer
- Major streets
 - With street names
 - Without street names
- Minor streets
 - With street names
 - Without street names



Available for Public Use

- City Boundary
- Congressional District
- State Senate District
- State Assembly District
- Supervisorial District
- School and College District

File Preparation Best Practices



Session 1: Redistricting 101

Part 1 introduced local redistricting – specifically the technicalities and changes since the redistricting process in 2011.

Part 2 discussed the process of how completed maps become ballots for voters, focusing on the importance of the Registrar of Voters' role in this process.



Tip 1: Consider Timelines

- Census data is delayed due to COVID-19, which causes delays for the start of redistricting
 - U.S. Census Bureau plans to release Census redistricting data by September 30, 2021
 - State needs 30 days to adjust data for incarcerated individuals
- Redistricting timelines differ depending on the next election



Timeline for Redistricting

County of Orange

- Next Election: June 7, 2022 Statewide Primary Election
- Redistricting Deadline (E-174): December 15, 2021

Charter and General Law Cities

- Next Election: November 8, 2022 Statewide General Election
- Redistricting Deadline (E-205): April 17, 2022



Timeline for Redistricting

School and Community College Districts

- Next Election: November 8, 2022 Statewide General Election
- Redistricting Deadline (before March 1st): February 28, 2022

Special Districts

- Next Election: November 8, 2022 Statewide General Election
- Redistricting Deadline (E-180): May 7, 2022



Tip 2: Consider Requirements

- AB 849 makes substantial changes to procedures and criteria governing redistricting
- New procedures apply to redistricting in 2021



Criteria for Redistricting

Public Hearing Requirements

- How many? When?

Map Publication Requirements

- When? Where?

Public Engagement Requirements

- Who? How?



Criteria for Redistricting

Map Requirements (ranked priority)

1. Geographically contiguous
2. Maintain geographic integrity of neighborhoods or local community of interest (share a common social or economic interest)
3. Respect geographic integrity of city of census-designated area and minimize division (county only)
4. Make district boundaries easily identifiable and understandable by residents
5. Supervisorial districts shall be drawn to encourage geographical compactness



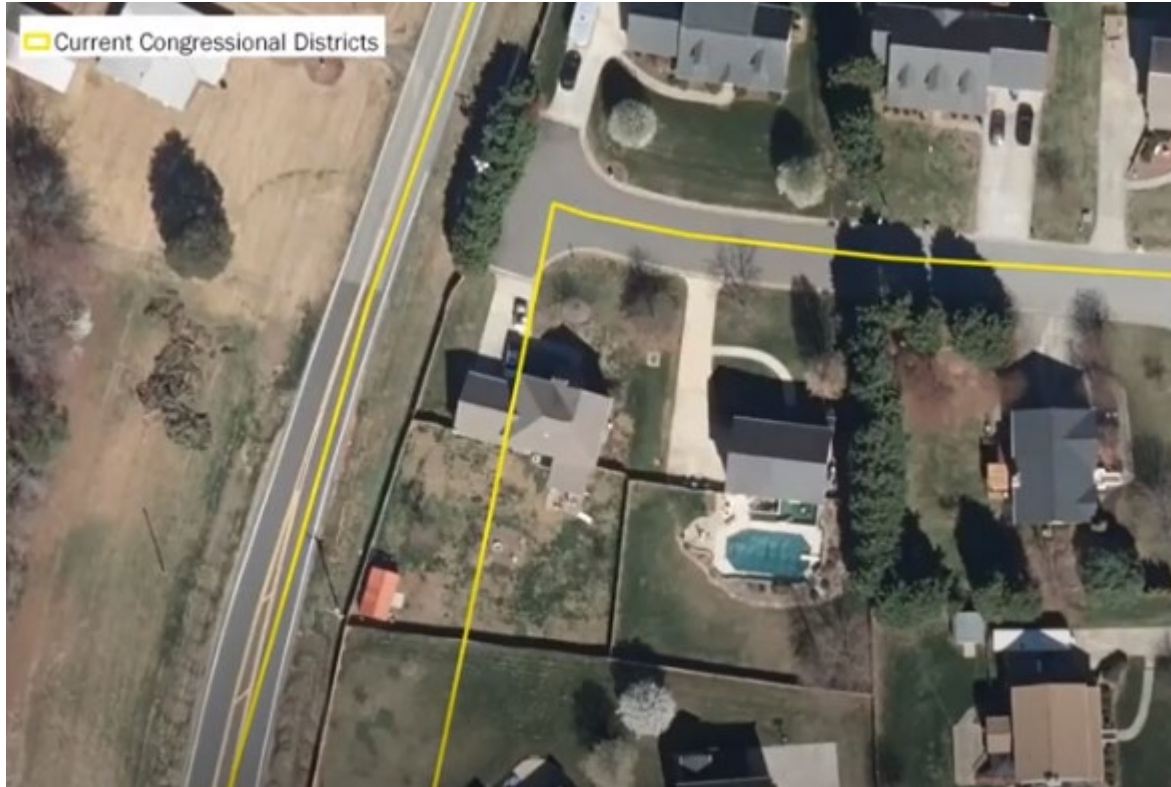
Tip 3: Consider Geographic Features

- Freeways
- Rivers, lakes, hills
- Streets
- Gated communities





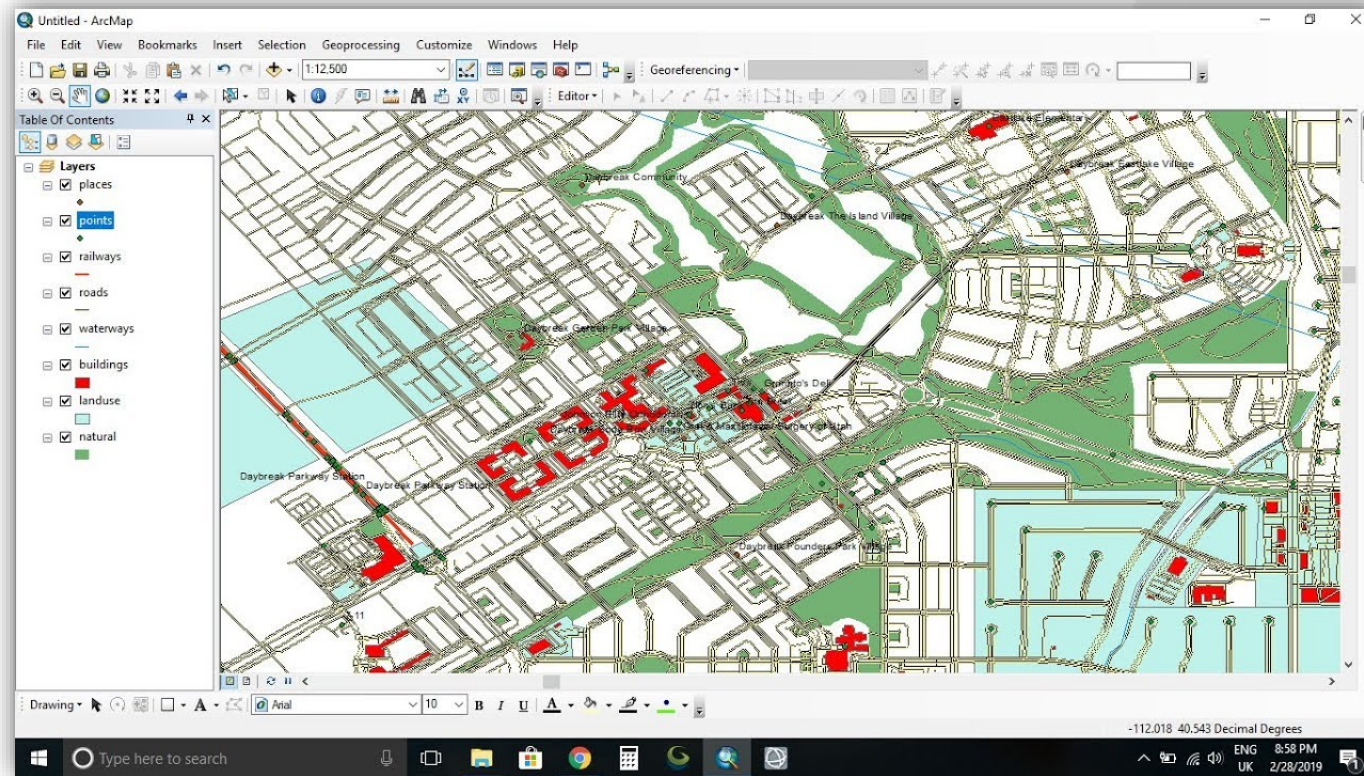
Tip 3: Consider Geographic Features





Tip 4: Consider File Delivery

Timely submission of shapefiles to the Registrar of Voters' office





Tip 4: Consider File Delivery

- Timely submission of new district lines to the Registrar of Voters is critical for the next stage of the redistricting process
- State and county are already engaged in redistricting
- City, school, and special districts should prepare ahead and begin the redistricting process as soon as possible

Lines should be shared with ROV as soon as they are adopted



More Information

State Redistricting (Congressional and State Legislative Districts)

- <https://www.wedrawthelinesca.org/>

County Redistricting (County Supervisorial Districts)

- <https://cob.ocgov.com/2021-redistricting>

City, Community College, School District

- Visit local agency website for more information

Questions?

THANK YOU

Visit ocvote.com/academy for recorded sessions and slides.