
Redistricting California: An Overview of Data & Processes to aid the Evaluation of Applicants

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Who we are and what we will do today:

- Statewide Database: Redistricting Database for the State of California – <https://statewidedatabase.org>
- Karin's and Jaime's redistricting experience
- Overview of this session:
 - Introduce Data used in Redistricting
 - Provide Context for qualifications of applicants the ARP will look for
 - Provide realistic examples of how qualifications may be applied
 - Live Demo on moving lines and how districts are constructed

Qualifications on which candidates will be selected:

- Analytical Skills – includes ability to understand technical materials incl. maps and statistical info; resolve complex problems
- Ability to be impartial – includes ability to evaluate information with an open mind, make decisions that set aside personal views/interests
- Appreciation for California's diverse demographics and geography – understanding that CA benefits from having effective participation by persons of all demographic characteristics incl. race, ethnicity, gender, sexual orientation, economic status

Applicants DO NOT need to be EXPERTS to be selected!

Analytical skills

Successful applicants should be able to:

- Learn about the different datasets
- Understand which data are used to measure or satisfy the various criteria
- Ask for clarification and explanations
- Receive input and be able to contextualize it
- Weigh conflicting input and data
- Analyze trade-offs and make decisions

Where do we start?

- California Constitution Article 21
- Sec 2. (d) The commission shall establish single-member districts for the Senate, Assembly, Congress, and State Board of Equalization pursuant to a mapping process using the following criteria as set forth in the following order of priority:

Criterion 1: Equal Population

- (1) Districts shall comply with the United States Constitution. Congressional districts shall achieve population equality as nearly as is practicable, and Senatorial, Assembly, and State Board of Equalization districts shall have reasonably equal population with other districts for the same office, except where deviation is required to comply with the federal Voting Rights Act or allowable by law.

Which data are used for the Equal Population Criterion?

- Decennial Census
- PL94-171 file
- Census block level dataset
- Reports total population and other variables
- Equal Population means assign everyone to a district
- NOT only Citizens, Voters, eligible voters, registered voters but rather EVERYONE* who was counted by the census
- *there is a caveat

Criterion 2: Federal Voting Rights Act

- (2) Districts shall comply with the Federal Voting Rights Act (42 U.S.C. Sec. 1971 and following)
 - Please note that there will likely be some confusion regarding the California Voting Rights Act which does NOT in any way apply to statewide redistricting
 - Applicants should have the analytical skills to be able to learn about the differences and explain this to the public

Data necessary to comply with the FVRA

- Two parts to comply:
 - Measuring/analyzing
 - Expert conducts a Racially Polarized Voting Analysis
 - Applicants must be able to work with their Expert(s) and Counsel to make decisions about Majority/Minority districts
 - Drawing a district
 - Applicants must be able to work with their redistricting consultant to construct districts that comply with the FVRA

- Census data
- American Community Survey
- Voter Registration
- Statement of Vote
- Geography

- Note that having political data available does not mean that they should or will be used for political purposes; these data are necessary for FVRA compliance

Criterion 3: Contiguity & Data used

- (3) Districts shall be geographically contiguous
- Geographic Criterion
- Data used:
 - Census geography

Criterion 4: Local jurisdictions & Communities

- (4) The geographic integrity of any city, county, city and county, local neighborhood, or local community of interest shall be respected in a manner that minimizes their division to the extent possible without violating the requirements of any of the preceding subdivisions. A community of interest is a contiguous population which shares common social and economic interests that should be included within a single district for purposes of its effective and fair representation.

Data to meet Criterion 4

- Cities, Counties, Cities and Counties?
 - Census geography

 - Neighborhoods?
 - Not readily available; Public testimony, Data/ Geography submitted by Public, Cities, etc.

 - Communities of Interest?
 - Not readily available; Public testimony, Data/ Geography submitted by Public, local officials, etc.; sometimes supplemented with other data.
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Criterion 5: Compactness & Data used

- (5) To the extent practicable, and where this does not conflict with the criteria above, districts shall be drawn to encourage geographical compactness such that nearby areas of population are not bypassed for more distant population.
- Geographic Criterion
- Data used:
 - Census Geography

Criterion 6: “Nesting” & Data used

- (6) To the extent practicable, and where this does not conflict with the criteria above, each Senate district shall be comprised of two whole, complete, and adjacent Assembly districts, and each Board of Equalization district shall be comprised of 10 whole, complete, and adjacent Senate districts.
- Data used:
 - Newly created districts

Redistricting Criteria and Data used:

- Equal Population – Decennial Census; PL94-171file
- Compliance with the Federal Voting Rights Act; PL94-171, Statement of Registration, Statement of Vote, Citizen Voting Age Population from American Community Survey (ACS)
- Contiguity – Census Geography
- Respect for City and County boundaries – Census Geography
- Respect for Neighborhoods – Public Testimony, Data/Geography submitted by Public, Cities/Counties, etc.
- Respect for Communities of Interest – Public Testimony, Data/Geography submitted by Public
- Compactness – Census Geography
- Nesting – Newly created districts

The Decennial Census

- Conducted every 10 years since 1790
- Determines the number of people living in the US
- “Count people once, only once and in the right place”
- The only “count” of the population
- Provides a ‘snapshot’ of the US population
- Collects data from every household and more
- Previously known as the “short form”

- Census Day is April 1 2020

What does the Census ask everyone?

- Basic questions including:
 - Name
 - Age
 - Race
 - Hispanic/Latino/Spanish Origin
 - Sex
 - Relationship
 - Owner/Renter
 - Will NOT ask a Citizenship question
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Census Data – P.L. 94-171

- **Mission:** Provide the officers or public bodies having initial responsibility for the legislative apportionment or districting of each State an opportunity to identify the geographic areas for which specific tabulations of population are desired and to deliver those tabulations in a timely manner.

- Identified “geographic areas desired”:
 - Census Tabulation Blocks

- Requirements:
 - Conduct the program in a non-partisan manner
 - Deliver the tabulations to the governor and the officers or public bodies having initial responsibility for the legislative apportionment or districting of each State no later than 1 year from Census Day (April 1, 2021)

What is in the P.L. 94-171 datafile?

- Final 2018 Prototype P.L. 94-171 Redistricting Data File Design
 - Table P1 – Race
 - Table P2 – Race for the Population 18 Years and Over
 - Table P3 – Hispanic or Latino, and not Hispanic or Latino by Race
 - Table P4 – Hispanic or Latino, and not Hispanic or Latino by Race for the Population 18 and Over
 - Table H1 – Occupancy Status (Housing)

- New Table:
 - Table P5 – Group Quarters Population by Group Quarters Type*

*Group quarters table includes only total population

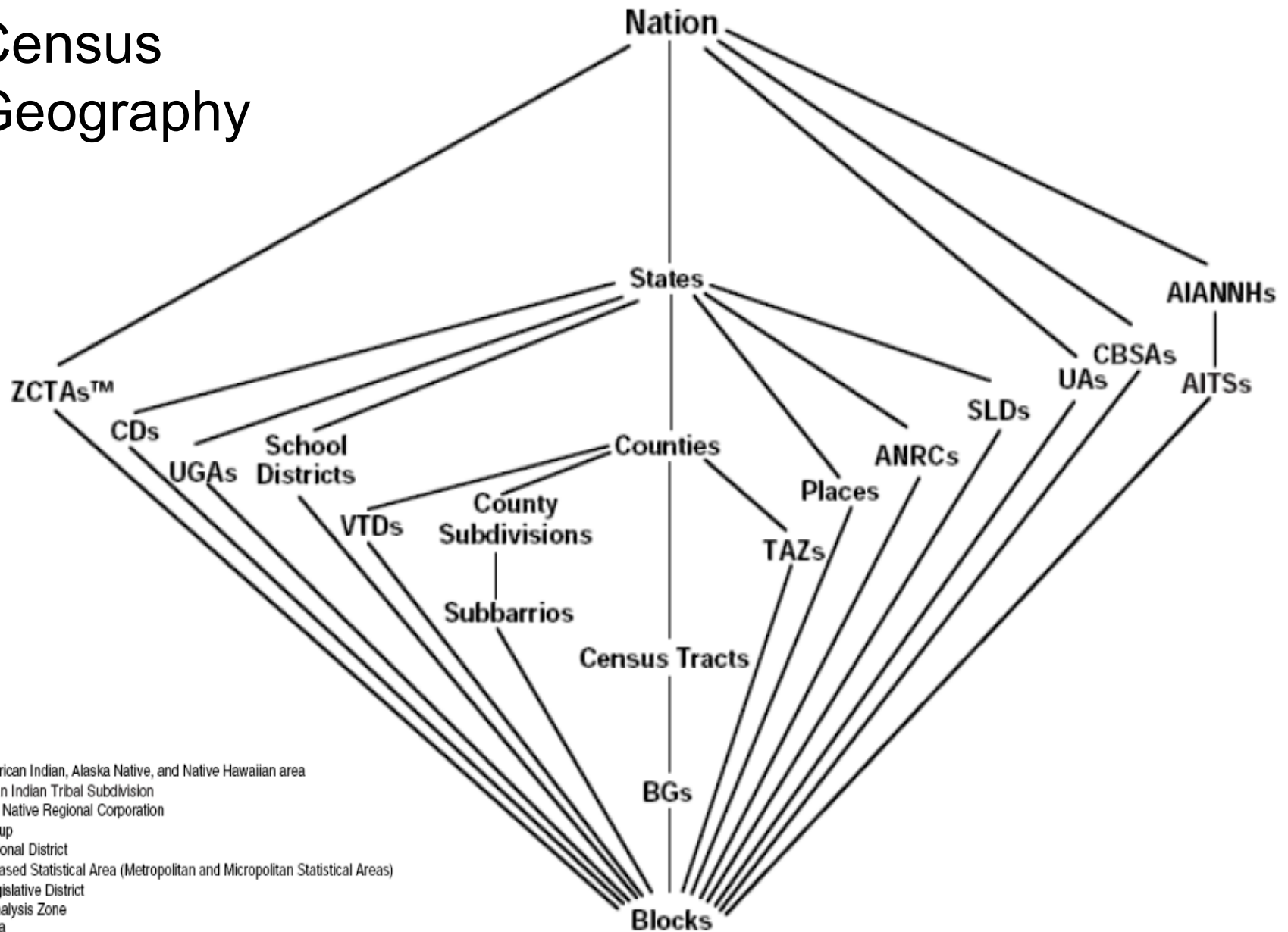
The American Community Survey

- Aka ACS
- Replaced the “long form” starting in 2005
- 2010 was the first “short form only” census
- ACS is conducted monthly
- Is released yearly
- Collected data include: educational attainment, income, housing costs, disability status, employment and more
- Collects data on Citizenship
- Releases Citizen Voting Age Population (CVAP)

More about the ACS

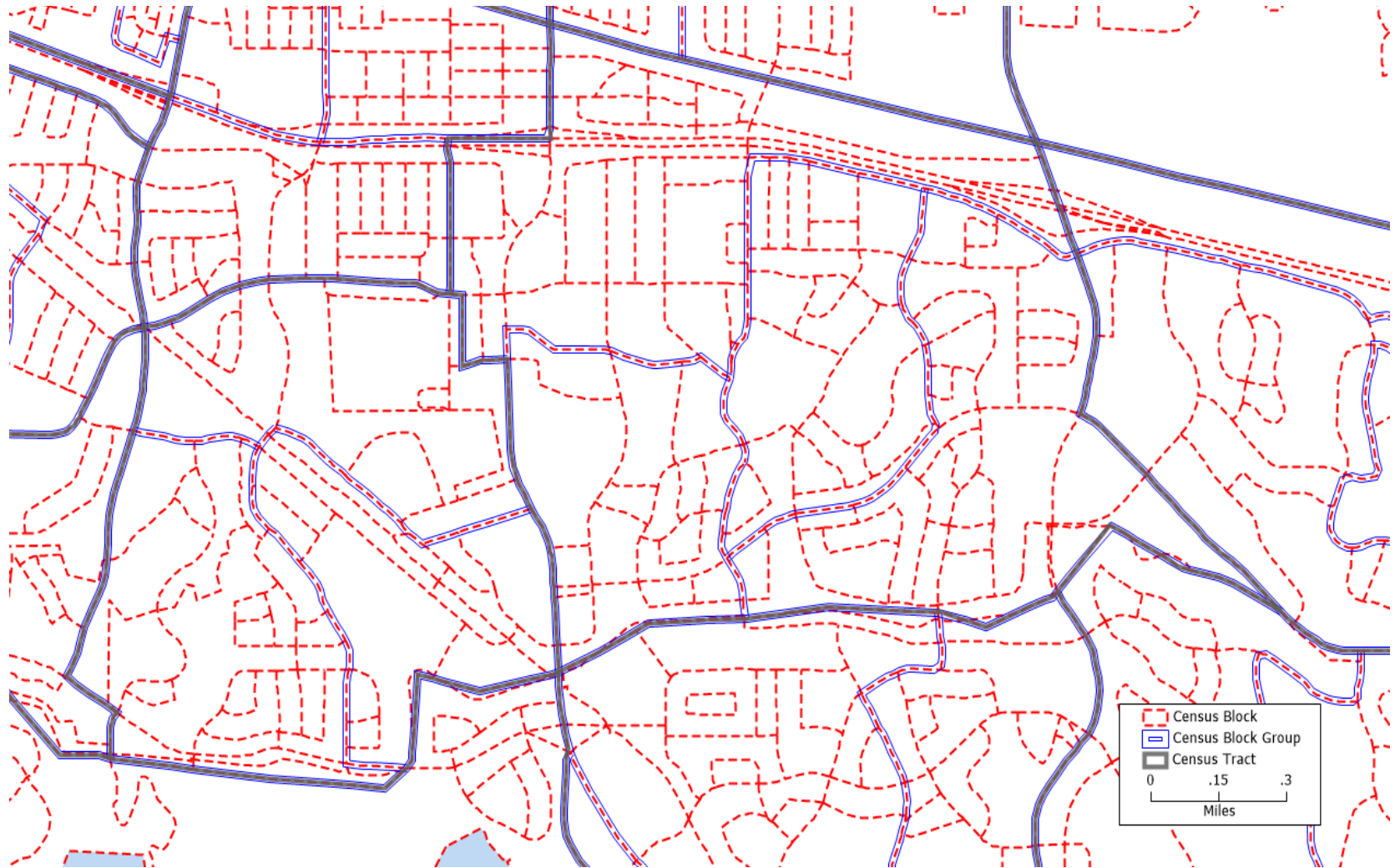
- The ACS is not a “count” of the population
- It produces estimates that are comparable for geographies recognized by the Census bureau
- Also described as a “portrait” of the population
- 5-year ACS estimates are released yearly for small geographies
- 3-year and 1-year estimates are released for larger geographies
- ACS data are NOT released on the census block level

Census Geography



AIANNH: American Indian, Alaska Native, and Native Hawaiian area
 AITS: American Indian Tribal Subdivision
 ANRC: Alaska Native Regional Corporation
 BG: Block Group
 CD: Congressional District
 CBSA: Core Based Statistical Area (Metropolitan and Micropolitan Statistical Areas)
 SLD: State Legislative District
 TAZ: Traffic Analysis Zone
 UA: Urban Area
 UGA: Urban Growth Area
 VTD: Voting District
 ZCTA™: ZIP Code Tabulation Area

Small area Census geography



Census Geography by the numbers:

- In California's 58 counties, the Census of 2010 delineated:
 - 8057 census tracts,
 - 23,212 census block groups
 - 710,144 census blocks

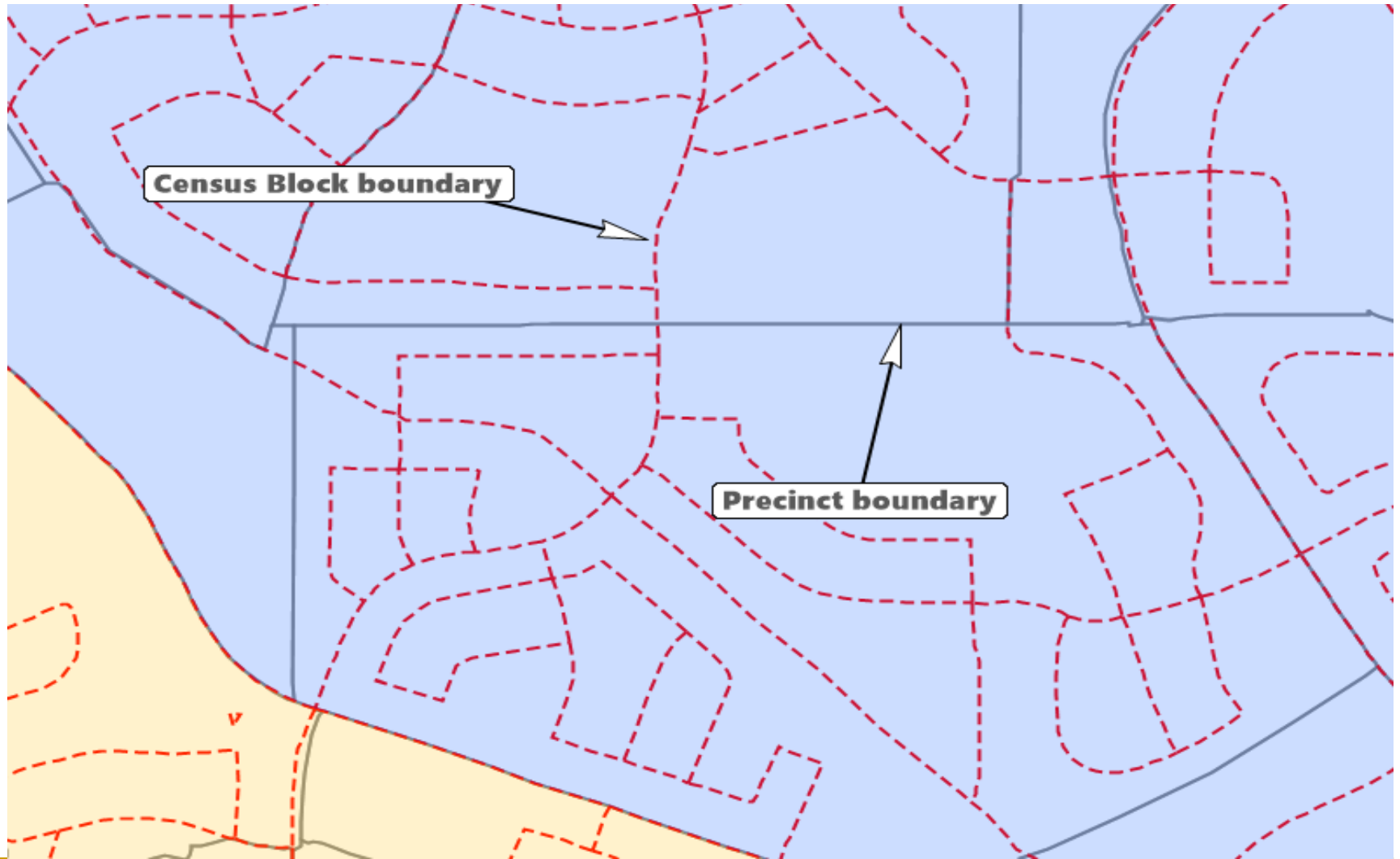
Election Data

- Necessary for FVRA assessment and compliance
- Used along with P.L.94-171 data and ACS
- Consist of two datasets:
 - SOR: Statement of Registration
 - SOV: Statement of Vote
- Collected by Registrars of Voters and Secretary of State
- SOR: Individual level dataset
- SOV: Precinct level dataset

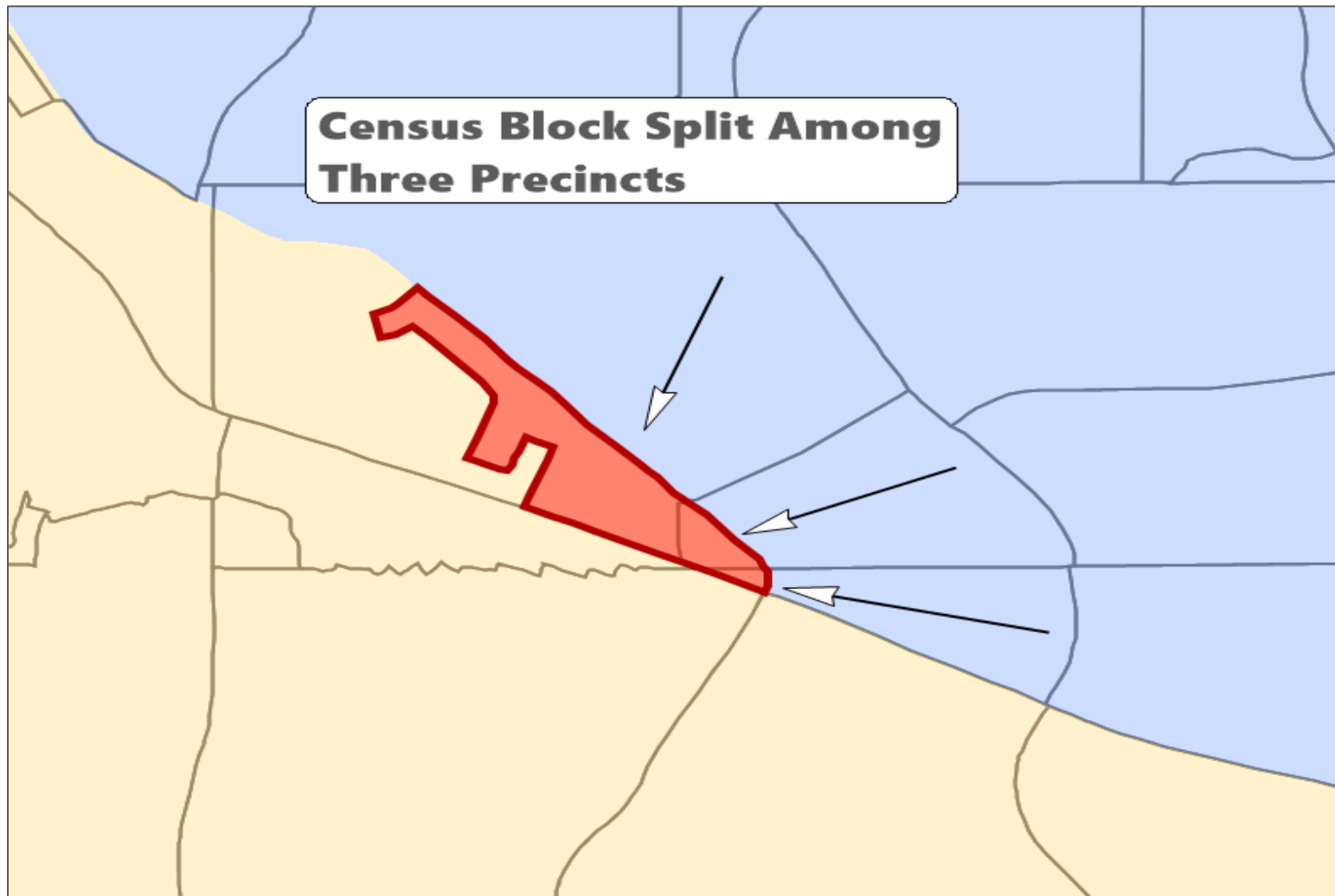
A note about geographies

- The datasets we have discussed are released on different geographies:
 - Census blocks (smallest)
 - Census block groups and tracts
 - Election precincts
- Census geography:
 - maintained by Census bureau
 - stays constant for 10 years
- Precinct geography:
 - Maintained by 58 Registrars of Voters
 - Organizing units to conduct elections and release results
 - Change frequently - often with each election

Election Precincts versus Census Blocks



Census Blocks versus Election Precincts



What is a Redistricting Database?

- A Redistricting Database solves the problem of conflicting, frequently changing geographies
 - It contains various datasets, merges them and releases them on the census block level
 - It typically contains:
 - Census Data
 - American Community Survey Data (CVAP)
 - Statement of Vote Data
 - Statement of Registration Data
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Redistricting Data for California

- Government Code Section 8253:
 - (b) The Legislature shall take all steps necessary to ensure that a complete and accurate computerized database is available for redistricting, and that procedures are in place to provide the public ready access to redistricting data
 - That function is provided by the Statewide Database

The Statewide Database

- The Redistricting Database for the State of California
- Part of Berkeley Law on the UC Berkeley campus
- Longitudinal dataset (back to 1992)
- Public, non-partisan, free-of-charge
- Available in different formats
- Provides data and geography for the entire State of California

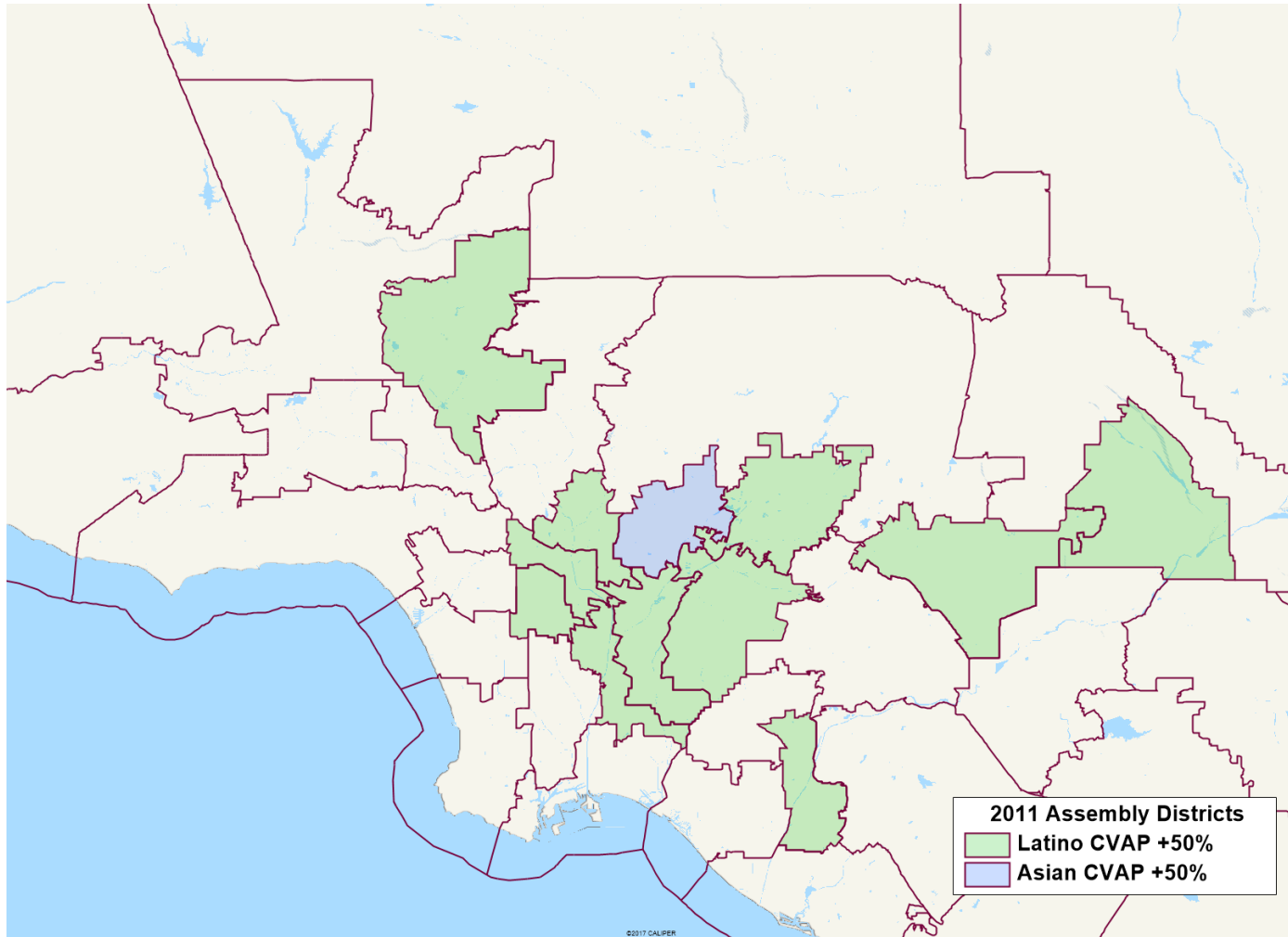
<https://statewidedatabase.org> - Our Data:

- Census – PI94-171
 - Statement of Vote from statewide elections
 - Statement of Registration from statewide elections
 - American Community Survey: Citizen Voting Age Population (CVAP)
 - Precinct data and geography
 - Each year ending with 1: A redistricting dataset containing new census data and multiple elections on the census block level
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Equal Population in Practice

| | Total Deviation | % Total Deviation | Deviation Range | %Deviation Range | Average Deviation | % Average Deviation |
|----------|-----------------|-------------------|-------------------|-------------------|-------------------|---------------------|
| Assembly | 9,224 | 1.981% | -4,573 to 4,651 | -0.982% to 0.999% | 2,357 | 0.506% |
| Senate | 18,489 | 1.985% | -9,226 to 9,263 | -0.991% to 0.995% | 4,185 | 0.449% |
| Congress | 2 | 0.000% | -1 to 1 | -0.014% to 0.014% | 0.66 | 0.000% |
| BOE | 168,718 | 1.812% | -93,132 to 75,586 | -1.000% to 0.812% | 58,709 | 0.630% |

Federal Voting Rights Act Considerations



Reallocation of Inmate Data for Census 2020

- AB420(Davis) and AB2172(Weber)
- Require the California Department of Corrections and Rehabilitation (CDCR) to provide a dataset to the Citizen Redistricting Commission (CRC) and the Legislature between April 1, 2020, and July 1, 2020 regarding the last known place of residence of each inmate in a facility under the control of the CDCR on April 1, 2020.
- Requires CDCR to provide information about the ethnicity, as identified by the inmate, and any information about the race of the inmate to the extent such information is maintained by CDCR.

Reallocation Data project cont.

- Requires the Legislature, in coordination with the CRC, to ensure that the information provided by CDCR is included in the computerized database that is used for redistricting.
- Requests the CRC to deem each incarcerated person as residing at his or her most recent residential address, rather than at the institution of his or her incarceration

What does this mean?

- 1. California will be adjusting the data it receives from the Census
 - i.e. the PL94-171 Total Population, Race and Ethnicity Counts will be adjusted such that Inmates under the control of the CDRC on Census Day (in group quarters) are reallocated to their last known residential address
- 2. The Citizen Redistricting Commission must consider whether to use the adjusted dataset for redistricting
- 3. The CRC must be able to explain to the public why the redistricting data for California are slightly different from the PL94-171 data as released by the census.

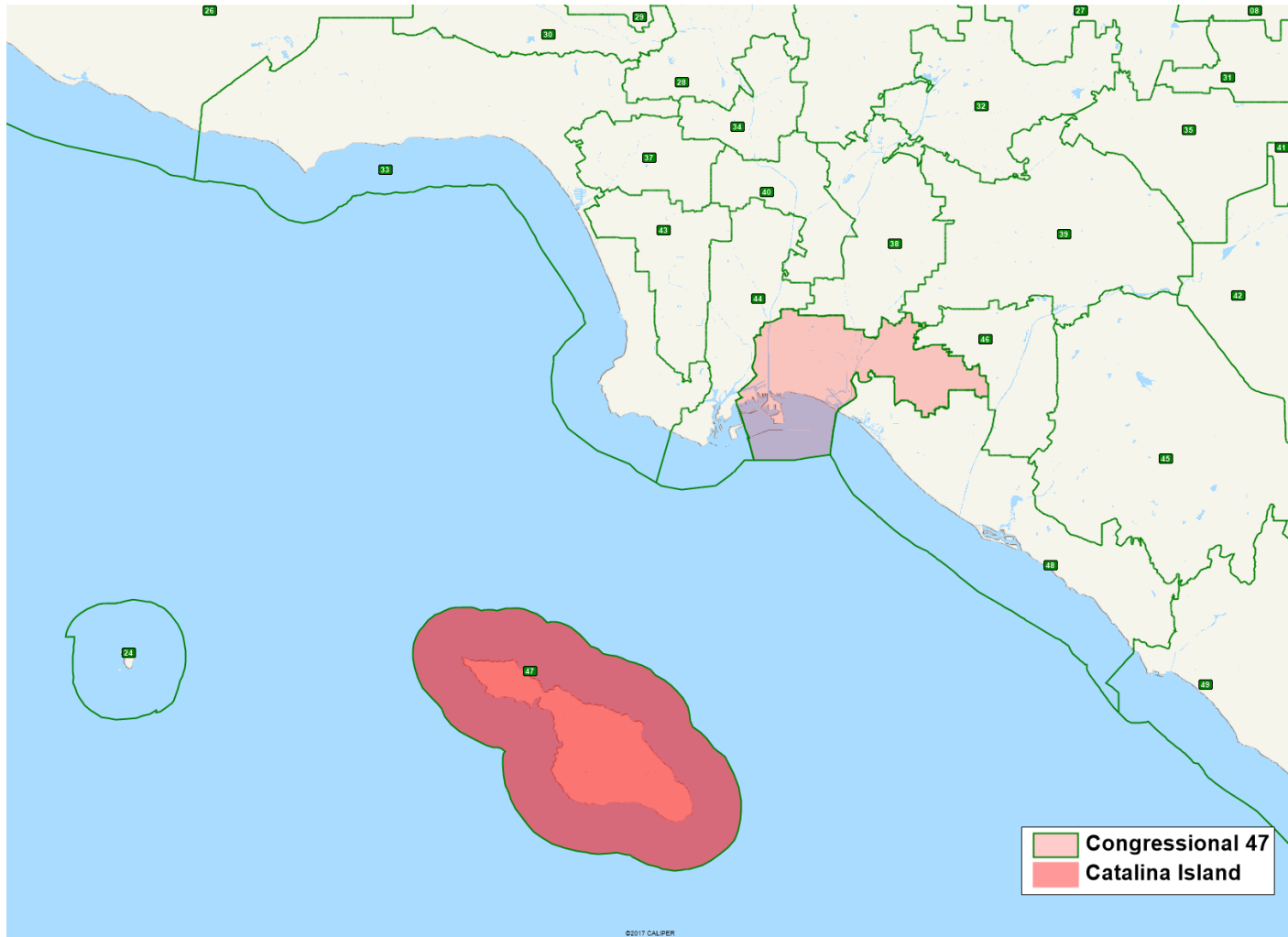
To summarize:

- Applicants for the Redistricting Commission should possess the analytical skills to:
 - Learn about the different datasets that are part of a Redistricting database
 - Understand why redistricting datasets are built on the census block level
 - Make decisions about the adjusted dataset
 - Explain to the public why data they may be using as part of a privately owned software package may differ from the official redistricting dataset

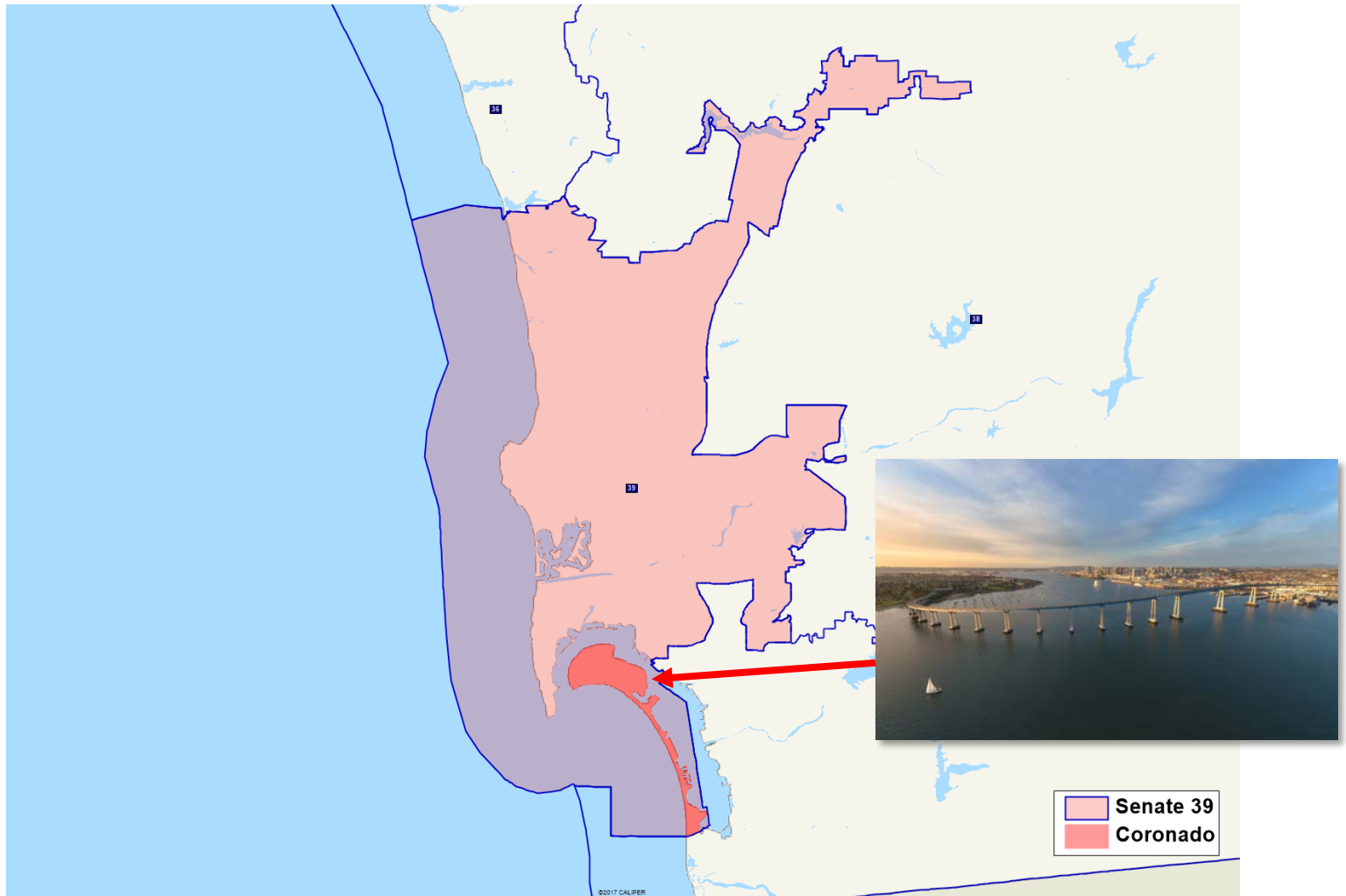
Criterion 3: Contiguity

- (3) Districts shall be geographically contiguous.
- Definition: A district in which all parts are connected to each other
in other words:
 - A district in which one may travel from any location to any other location without crossing the district boundary
 - Census geography is used to meet this criterion

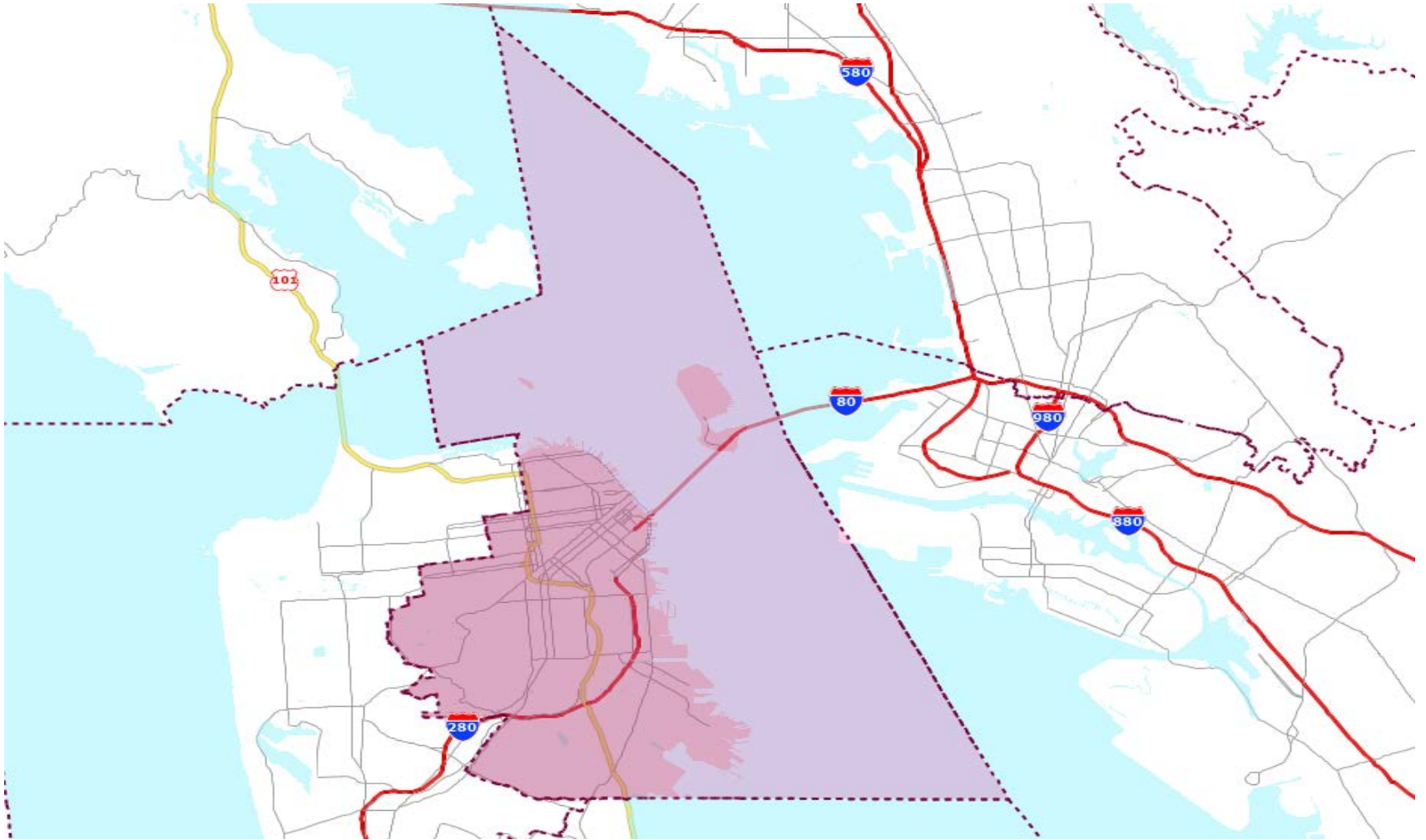
Criterion 3: Contiguity (Islands)



Criterion 3: Contiguity (Bridge)



Criterion 3: Contiguity (Island and Bridge)



Criterion 4: Local jurisdictions & Communities

- Data on County and City boundaries are part of the SWDB but data on communities of interest are not.
- Neighborhood Data and Boundaries?
 - Not readily available and need to be collected
 - Will rely on Public testimony, Data/ Geography submitted by Public, Cities, etc.
- Communities of Interest?
 - Not readily available and need to be collected
 - Public testimony, Data/ Geography submitted by Public, local officials; data sources.

Neighborhoods, Communities and Public Input

- Government Code Section 8253:
 - The commission shall establish and implement an open hearing process for public input and deliberation that shall be subject to public notice and promoted through a thorough outreach program to solicit broad public participation in the redistricting public review process

Communities of Interest: what are they?

- California Constitution Article 21 provides definitions and some examples:
 - A community of interest is a contiguous population which shares common social and economic interests that should be included within a single district for purposes of its effective and fair representation.
 - Examples of such shared interests are those common to an urban area, a rural area, an industrial area, or an agricultural area, and those common to areas in which the people share similar living standards, use the same transportation facilities, have similar work opportunities, or have access to the same media of communication relevant to the election process.
 - Communities of interest shall not include relationships with political parties, incumbents, or political candidates.

How to define Communities of Interest

- Through a public input process that solicits information from those that live or work in the community
- Request oral or written testimony about the community
- Ask the public for input on:
 - What bonds the community/what is the commonality?
 - Where is the community located? What are its borders
 - Why should it stay together?

A note about Communities of Interest

- They may or may not be supported by quantitative data, such as Census or American Community Survey (ACS) data (and don't need to be)
- There may be conflicting information about a Community of Interest
- They can vary in size and range from small to large
- They can have a 'current' interest or a 'goal' to binds them
- Neighborhoods and Communities of Interest are part of the same Criterion (4) and are not ranked within the Criterion; i.e. they hold the same weight as Cities and Counties.
- The law does not limit the kinds of interests that bind a community (exception: no political parties, candidates or incumbents, please!)

Communities of Interest: Examples

■ Economic interests:

- ❑ Current situation -- common employment or economic opportunities (or lack thereof).
- ❑ Goals -- expanding opportunities, development, bringing in businesses and jobs, etc.

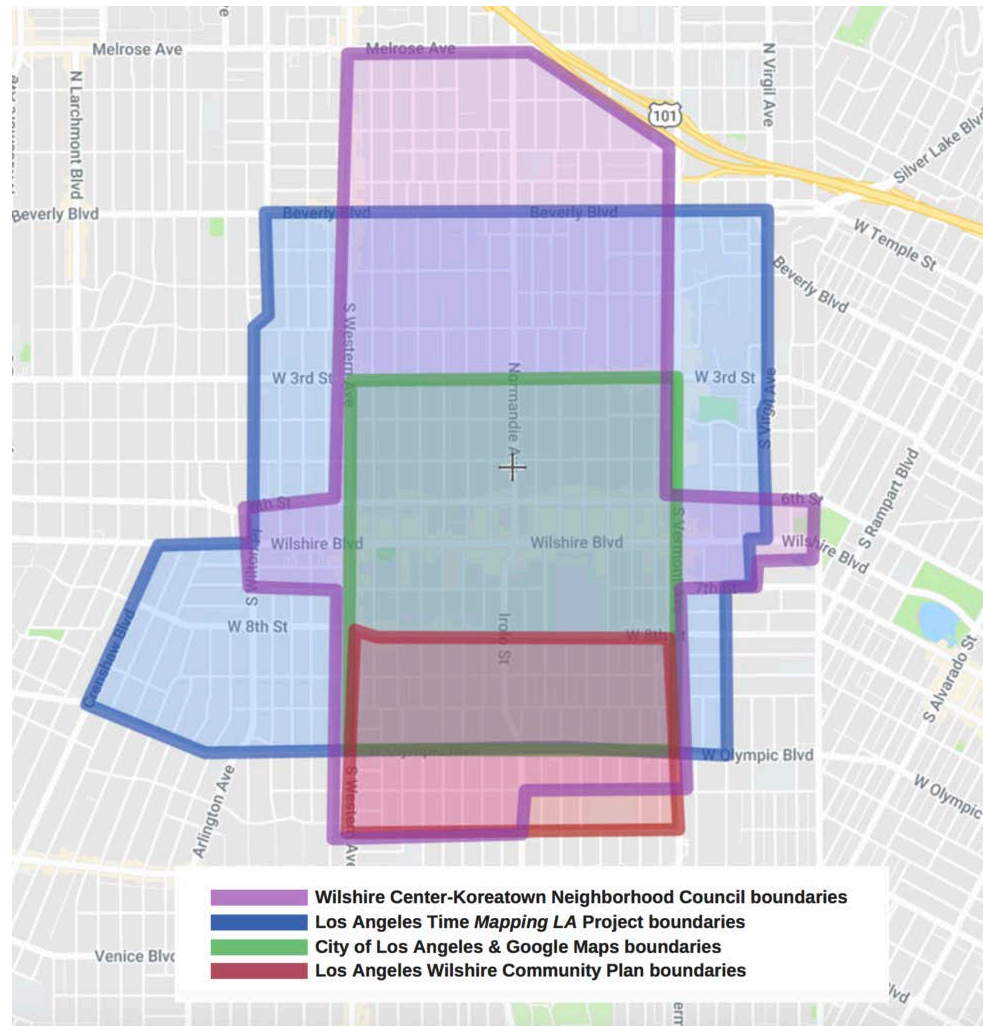
■ Social interests:

- ❑ Current -- schools, culture, transportation, parks
- ❑ Goals -- improving recreation opportunities or public safety, etc.

Community of Interest Examples cont.

- Foothill counties sharing the same watershed
- Communities organizing around a historic neighborhood
- Cities with a shared transportation corridor
- Cities with a commonality of economic interests
- Areas with a high non-English speaking cultural community
- Organized neighborhoods with an active group
- Communities organizing around economic development
- Coastal communities working to fight off-shore drilling

Where is L.A.'s Koreatown?



https://commons.wikimedia.org/wiki/File:Visual_depiction_of_Koreatown_boundaries_according_to_different_sources.png

Criterion 5: Compactness

- (5) To the extent practicable, and where this does not conflict with the criteria above, districts shall be drawn to encourage geographical compactness such that nearby areas of population are not bypassed for more distant population.
- Census Geography and Population are used to measure this criterion

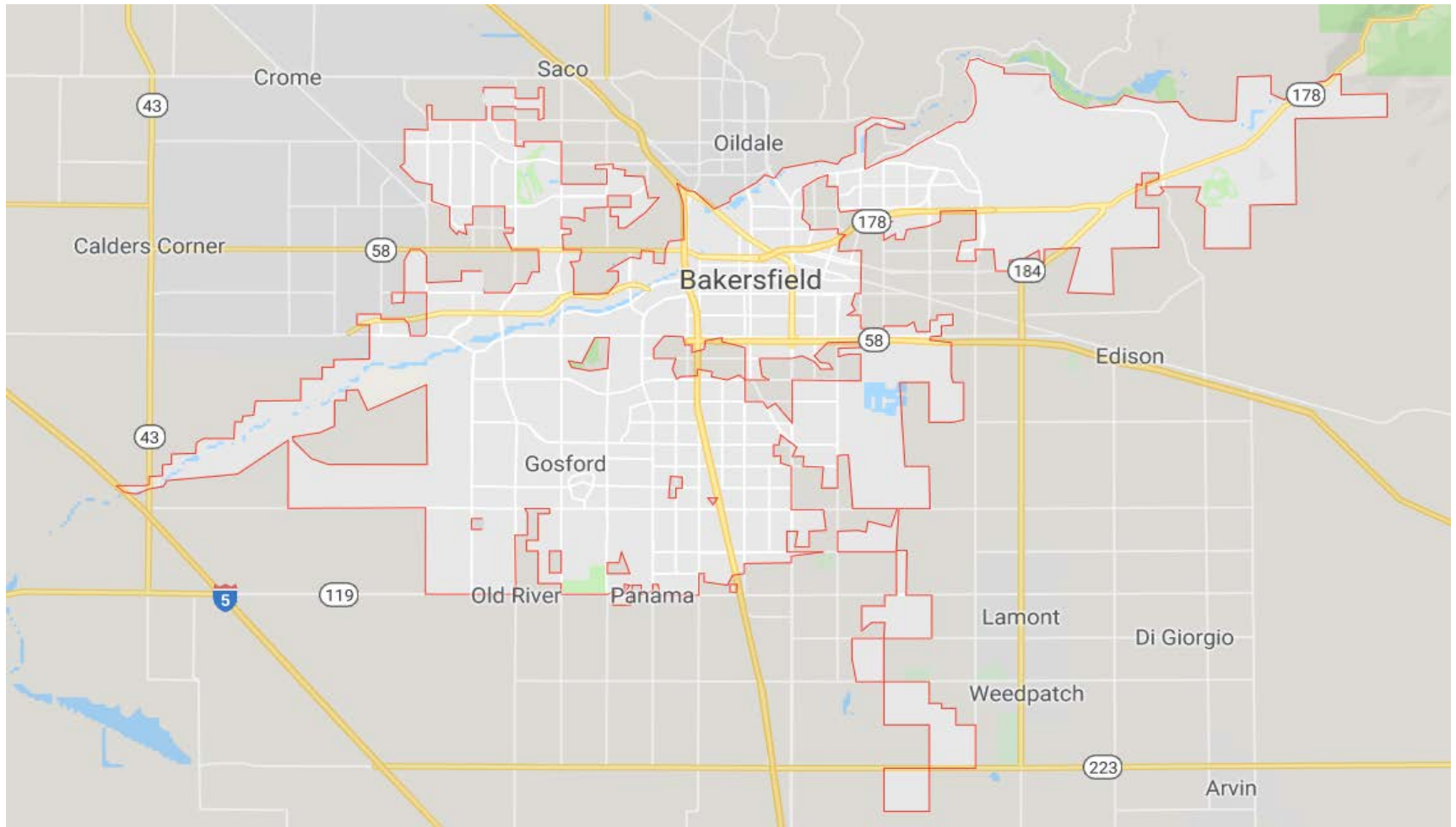
Criterion 5: Compactness

- Addresses the geography of the district
- Assumed to “guard against all types of gerrymandering” “drastic departures from compactness are a signal that something may be amiss”
- There are hundreds of measures that have been developed to measure compactness; note: CA has a definition
- Courts have used the “eyeball approach” and said that “appearances do matter”

Criterion 5: Compactness

- It can be difficult to create a compact district
- There may be trade-offs with other criteria, i.e. Cities may not be compact but are part of a higher ranked criterion
- It can be difficult to ascertain whether a district is non compact without having more information
- Nesting two compact Assembly districts may result in a non-compact Senate district

Is this compact?



Compactness and the resolution of complex problems

Lessons learned from research:

Criteria Interaction effects on Compactness

- Majority/Minority Seats
- Preserving City and County Boundaries
- Respecting Communities of Interest

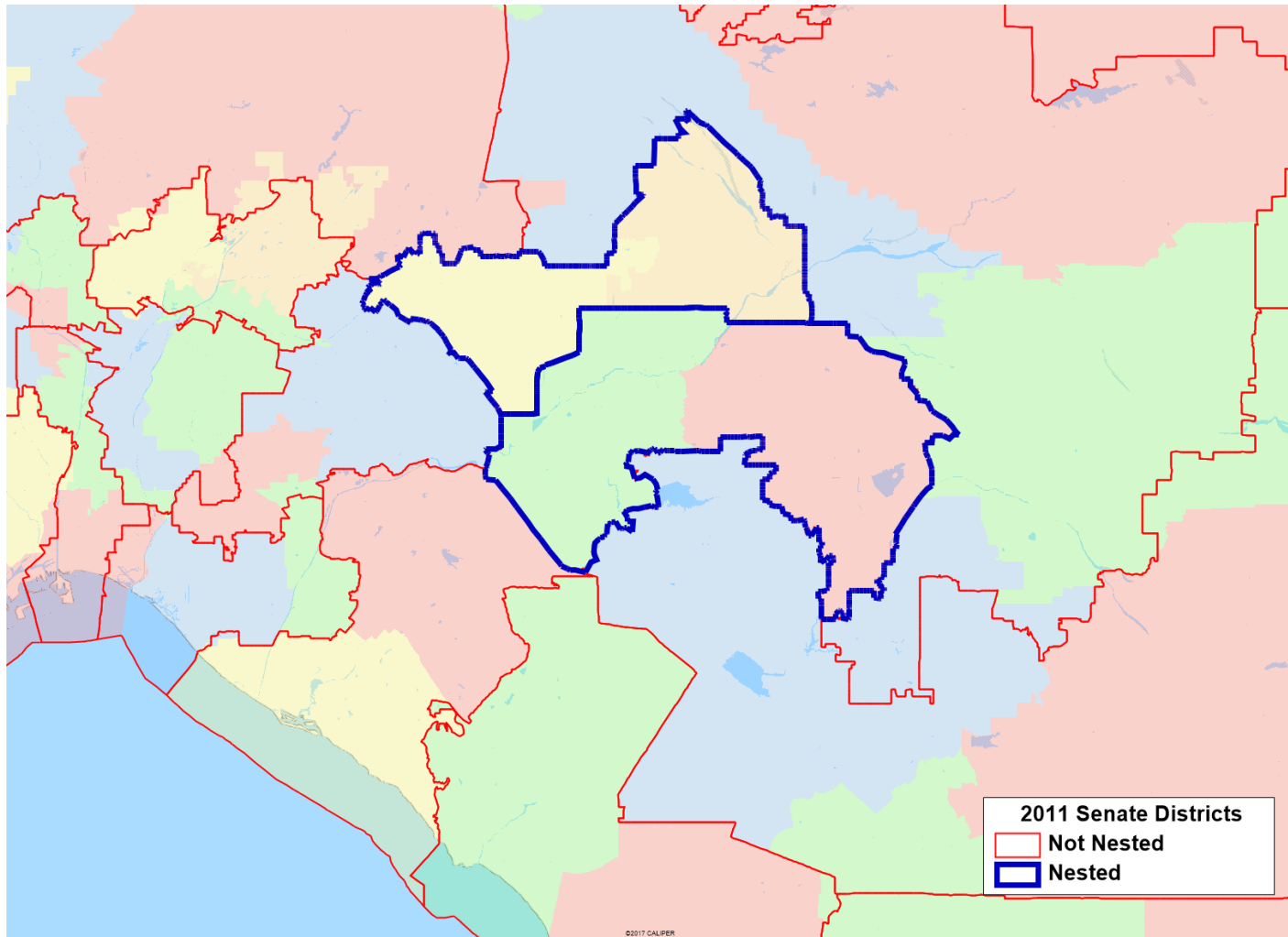
Criterion 6: Nesting

- (6) To the extent practicable, and where this does not conflict with the criteria above, each Senate district shall be comprised of two whole, complete, and adjacent Assembly districts, and each Board of Equalization district shall be comprised of 10 whole, complete, and adjacent Senate districts.
- The newly created districts are used for this criterion
- It is the lowest ranked criterion

Nesting in Research

- Trade-offs with other criteria
- Constrains line drawing process
- May 'double a wrong' if Assembly Districts did not meet the needs of a community
 - City Splits
 - Community of Interest Splits
- Compactness

Nesting in Practice



Qualifications on which candidates will be selected:

- Analytical Skills – includes ability to understand technical materials incl. maps and statistical info; resolve complex problems
- Ability to be impartial – includes ability to evaluate information with an open mind, make decisions that set aside personal views/interests
- Appreciation for California's diverse demographics and geography – understanding that CA benefits from having effective participation by persons of all demographic characteristics incl. race, ethnicity, gender, sexual orientation, economic status

Applicants DO NOT need to be EXPERTS to be selected!

What's next?

- Line drawing and illustration of criteria implementation

THANK YOU!