California's Diverse Demographics and Geography

Citizens Redistricting Commission training

August 28, 2020

Eric McGhee

PPIC PUBLIC POLICY INSTITUTE OF CALIFORNIA 25 YEARS

Outline

- Sources of data
- Demographic trends and patterns
- Commission 2011

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  - Decennial censuses
  - Population estimates and projections
  - Survey data
  - Administrative data and other sources
  - Errors in the data
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Decennial census purpose

- Why take a census?
  - Apportion the House of Representatives
  - Determine political districts
  - Disburse funds for programs (more than $400 billion in federal funds every year)
  - Develop a portrait of our nation

Decennial census goals and methods

- The 2020 Census
  - Goal: Count everyone once, only once, and in the right place
  - One person reports for everyone else in the household
  - Questionnaire: Just a few questions (name, age, race/ethnicity, gender, own/rent, relationships within household)
  - Citizenship question controversy

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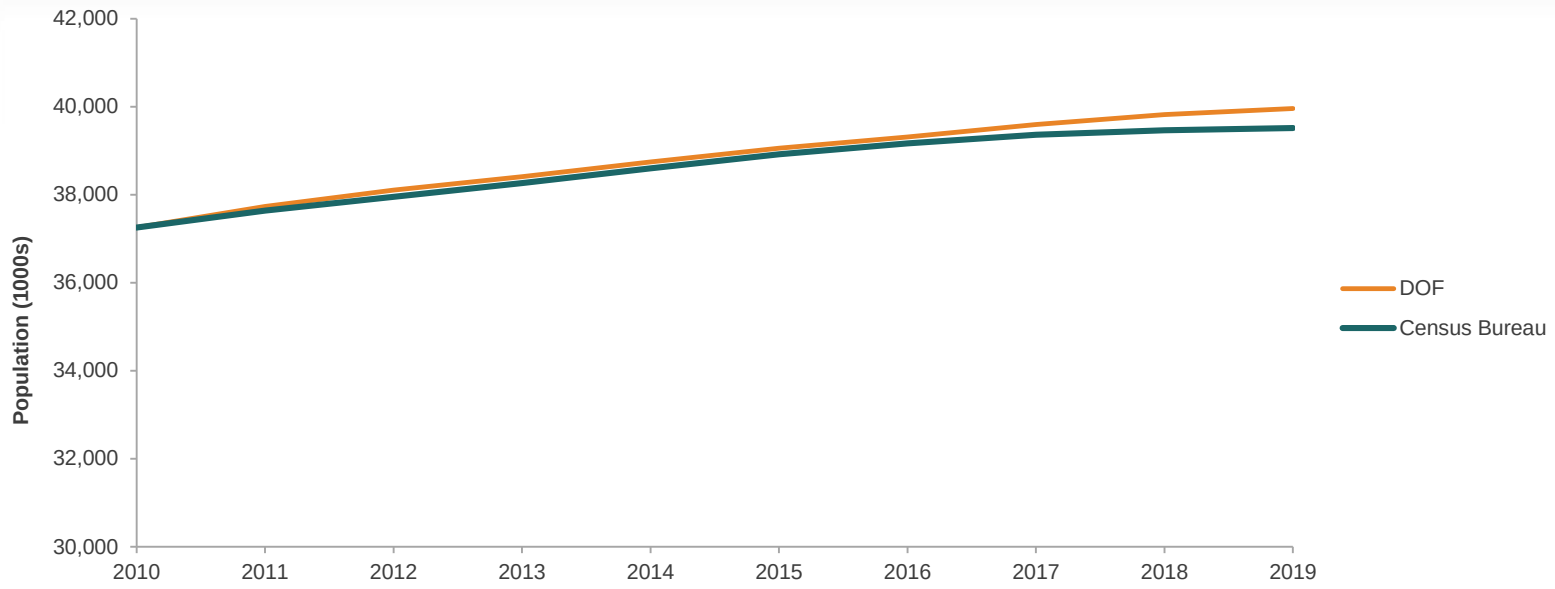
Population estimates and projections

- Estimates are historical population figures
- Projections are future population figures
- Produced by the US Census Bureau and the California Department of Finance
- Estimates are based on decennial census counts updated with recent administrative data
- Projections are based on assumptions about future fertility, mortality, and migration rates

Type of estimates data available

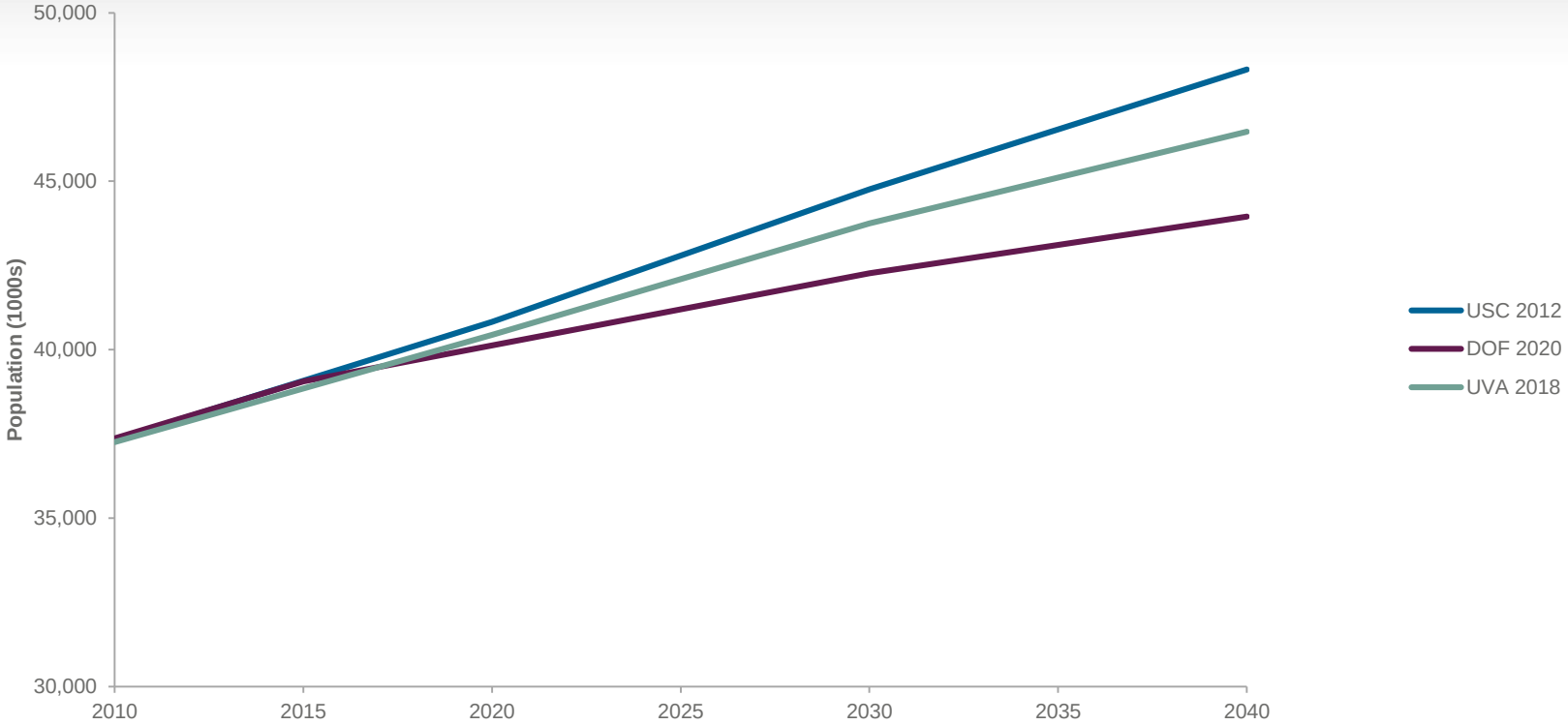
	Census Bureau	Dept. of Finance
Population totals		
State	X	X
Counties	X	X
Cities (total population only)	X	X
Components of change		
Births	X	X
Deaths	X	X
Domestic migration	X	X
International migration	X	X
Number and type of housing units		X
Population characteristics		
Age	X	X
Gender	X	X
Ethnicity	X	X

Latest population estimates have diverged some



Source: Department of Finance, U.S. Census Bureau

Projections for California can diverge a lot



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Two primary surveys of the U.S. population

- Both surveys conducted by the Census Bureau
- Current Population Survey
  - Monthly survey
  - Focus on labor market
- American Community Survey (ACS)

What is the ACS?

- Monthly survey conducted by the Census Bureau
- Annually samples about 3 million households
- Items covered are similar to those of the long-form questionnaire of the 2000 decennial census
- Replaced the long form of the census starting in 2010

ACS: Topics Covered

- Demographic characteristics
- Income and employment
- Transportation
- Education
- Origins and languages
- Migration
- Disability and caregivers
- Housing: Physical characteristics
- Housing: Financial characteristics

Advantages of the ACS

- Large sample relative to the Current Population Survey
  - ~3 million (~250K / mo) versus 60,000 households
- Timely data relative to the decennial census
- Lots of topics covered—great portrait of the nation on many dimensions

Limitations of the ACS

- Not a count of the population
- Small sample relative to the decennial census
  - Census long-form went to one in six households
  - ACS goes to one in forty
- A moving average rather than a point in time
- Estimates for census tracts and block groups will be based on five year periods
- Can’t be used for redistricting
- Estimates still pegged to the decennial census

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Administrative and other sources of demographic and housing data

- California Statewide Database (UC Berkeley)
  - Voter registration
  - Election outcomes
  - Maps and mapping resources
- California Department of Education
  - School demographics
  - School test scores
- California Employment Development Department
  - Unemployment rates
  - Occupations
- Private sources

Census citizenship data from administrative records

- Intend to produce full count
  - Will come with the redistricting file
- Based on matches to administrative records (SS, immigration)

- For redistricting?
  - Ambiguity from U.S. Supreme Court
  - California constitution much less ambiguous: “population equality” and “equal population”

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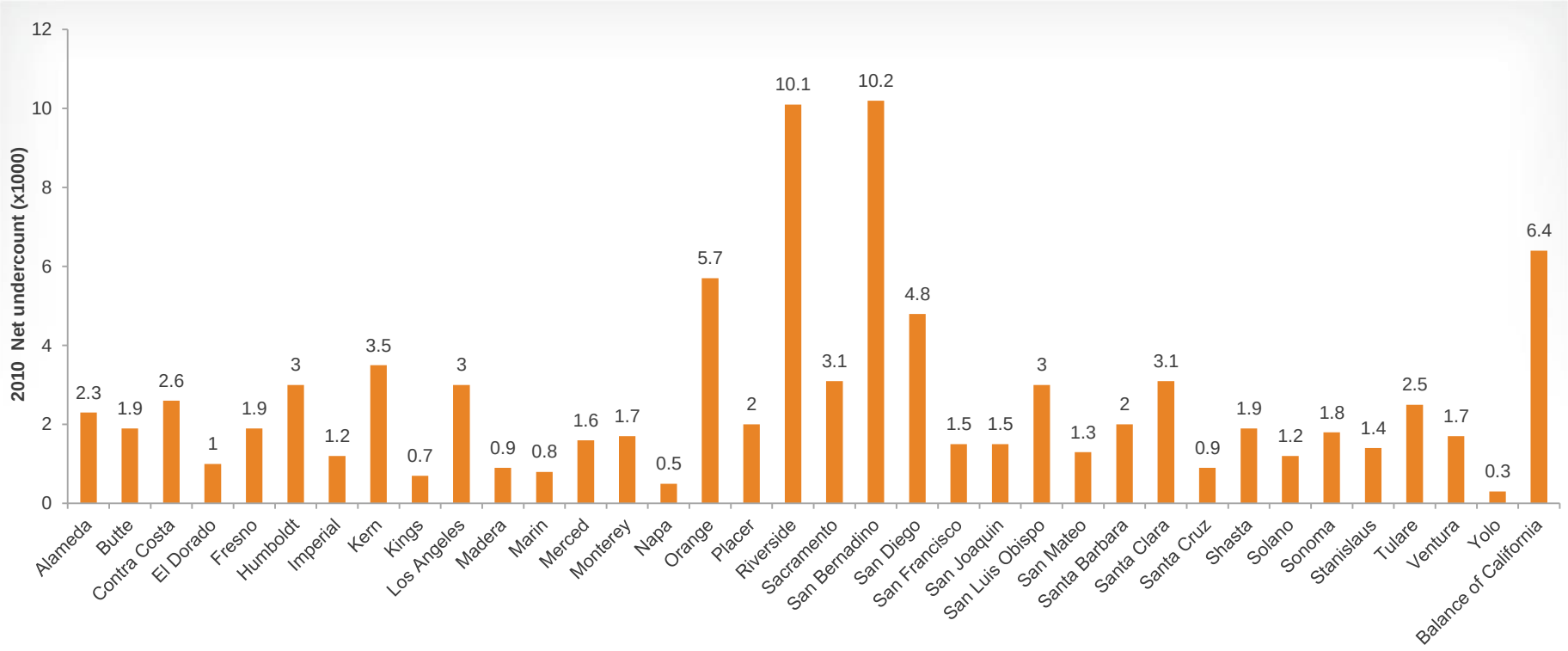
California tends to have high net undercount rates

- 1990
  - CA: -2.7%
  - US: -1.6%
- 2000
  - CA: -0.1% (one of only 10 states)
  - US: +0.5%
- 2010
  - CA: -0.26%
  - US: +0.01%

Undercounts vary by county



Source: US Census Bureau

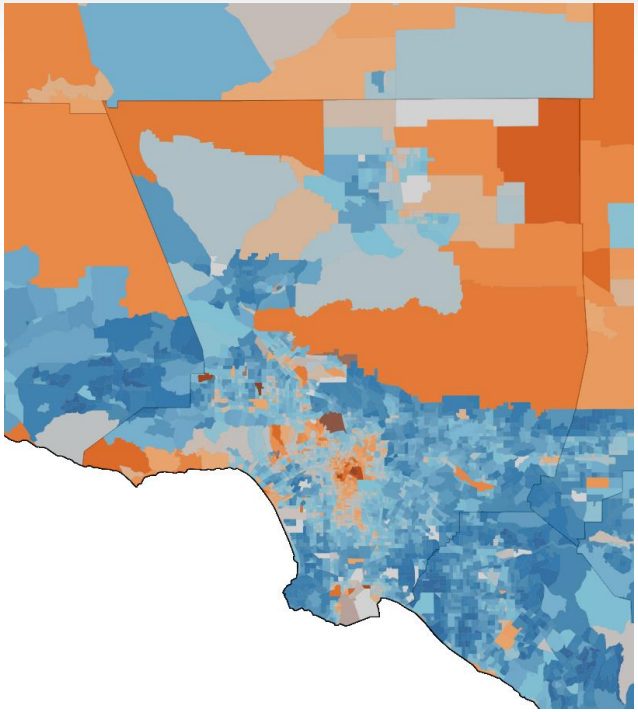
Concerns about a 2020 Census undercount: *Pre-pandemic*

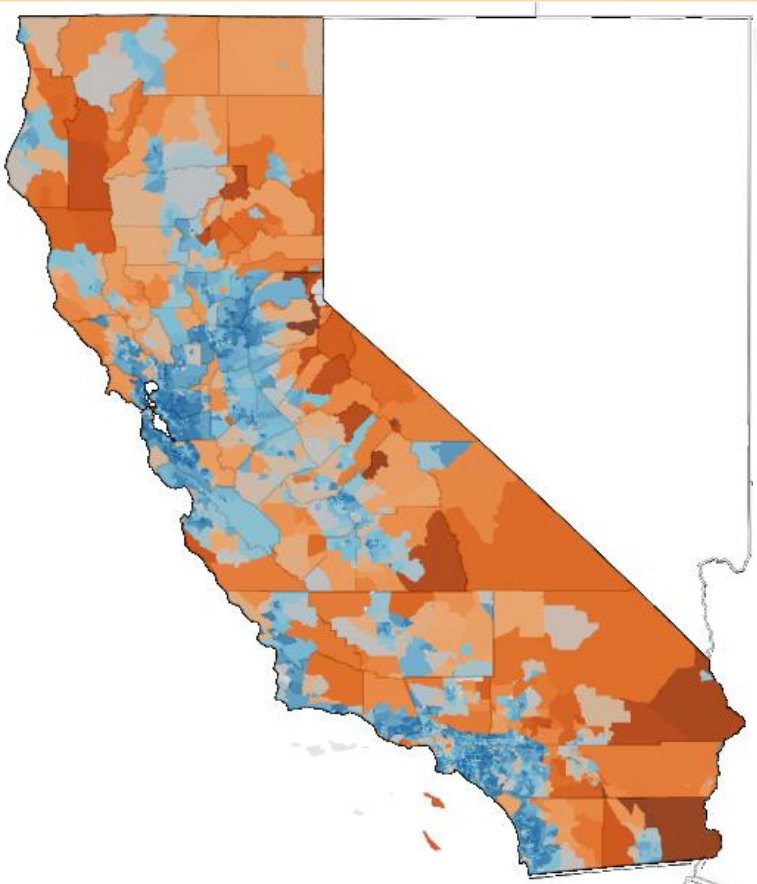
- Funding challenges
- First-time Internet survey
- More aggressive administrative matching
- General distrust that depresses response rates
- Non-citizen distrust

Concerns about a 2020 Census undercount: *Post-pandemic*

- Crowding out of census news
- Cancellation/delay of in-person events and enumerations
- Displacement due to pandemic (what is the “right place”?)
- Difficulty finding enumerators to go into the field
- Distance from official census day (April 1)
- Tight timeline
  - Limited in-field quality checks
  - Compressed timeline for post-field data fixes

Some parts of California more vulnerable to undercount





Source: US Census Bureau

What should we do about a bad census?

- Quality metrics
  - Department of Finance estimates
  - Post-Enumeration Survey (PES) and demographic analysis (DA)
  - Type of count conducted (Total only? Proxy?)

- Detailed enough?
- Timely enough?

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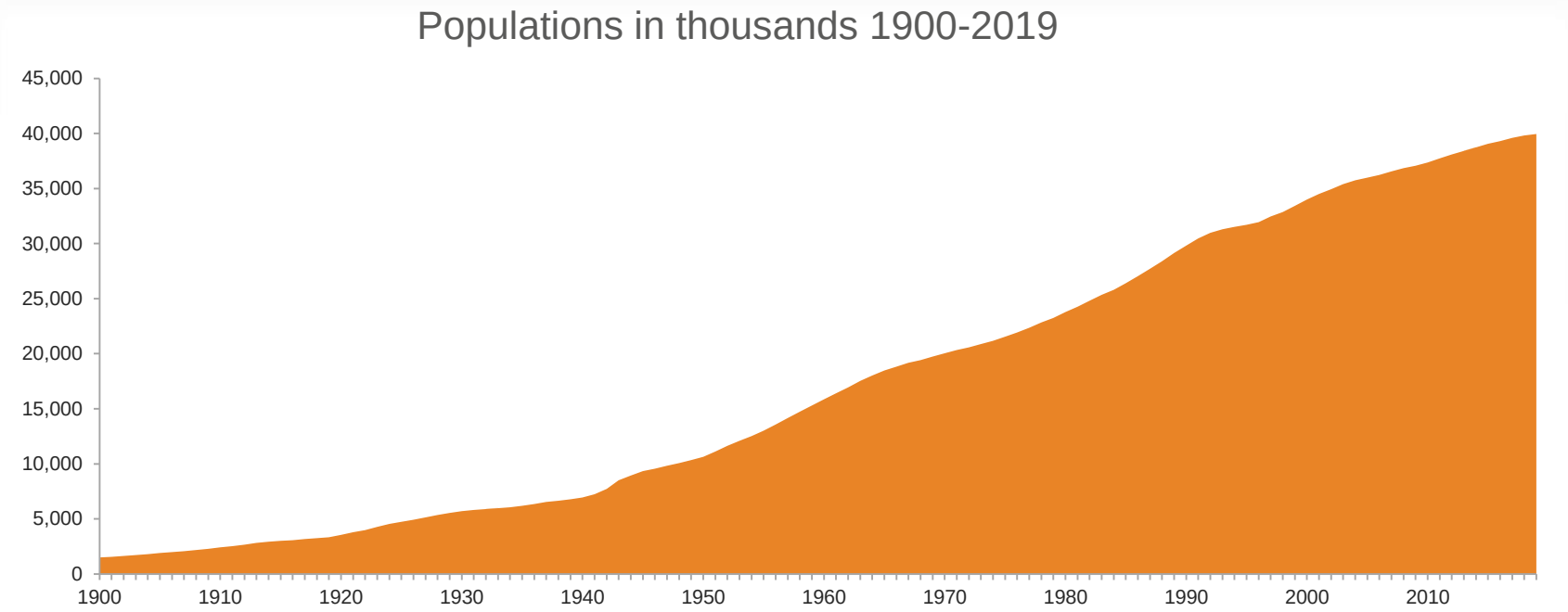
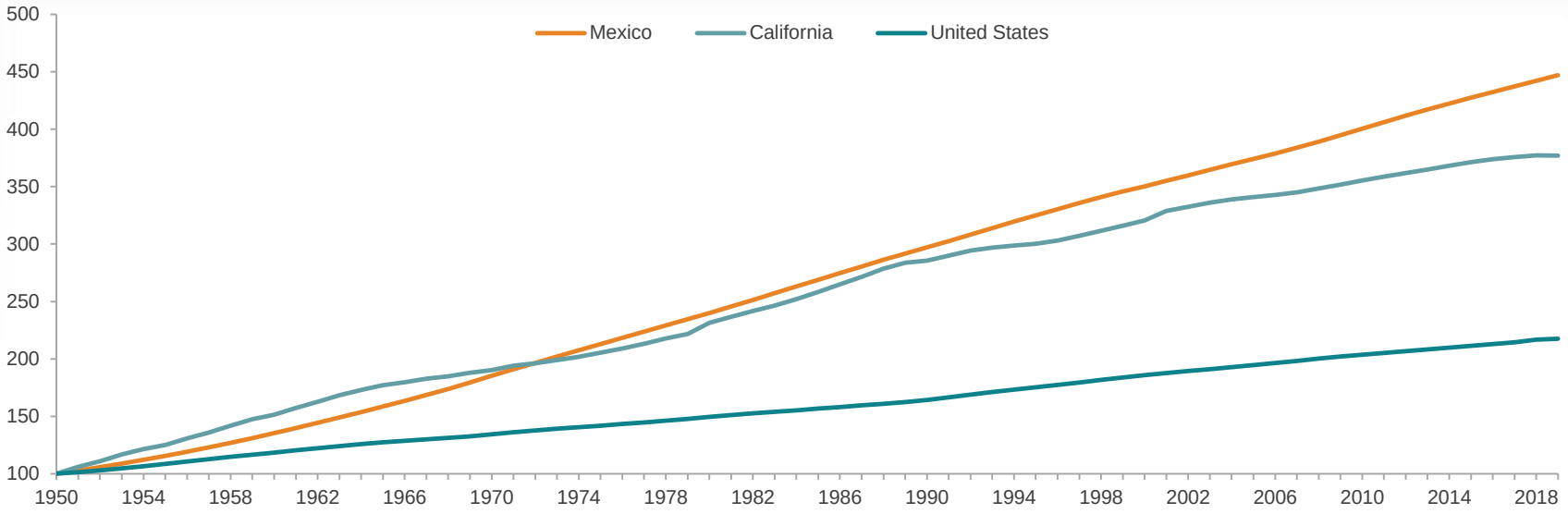
California has a large and growing population



Comparisons of Population Change 1950=100



Source: US Census Bureau

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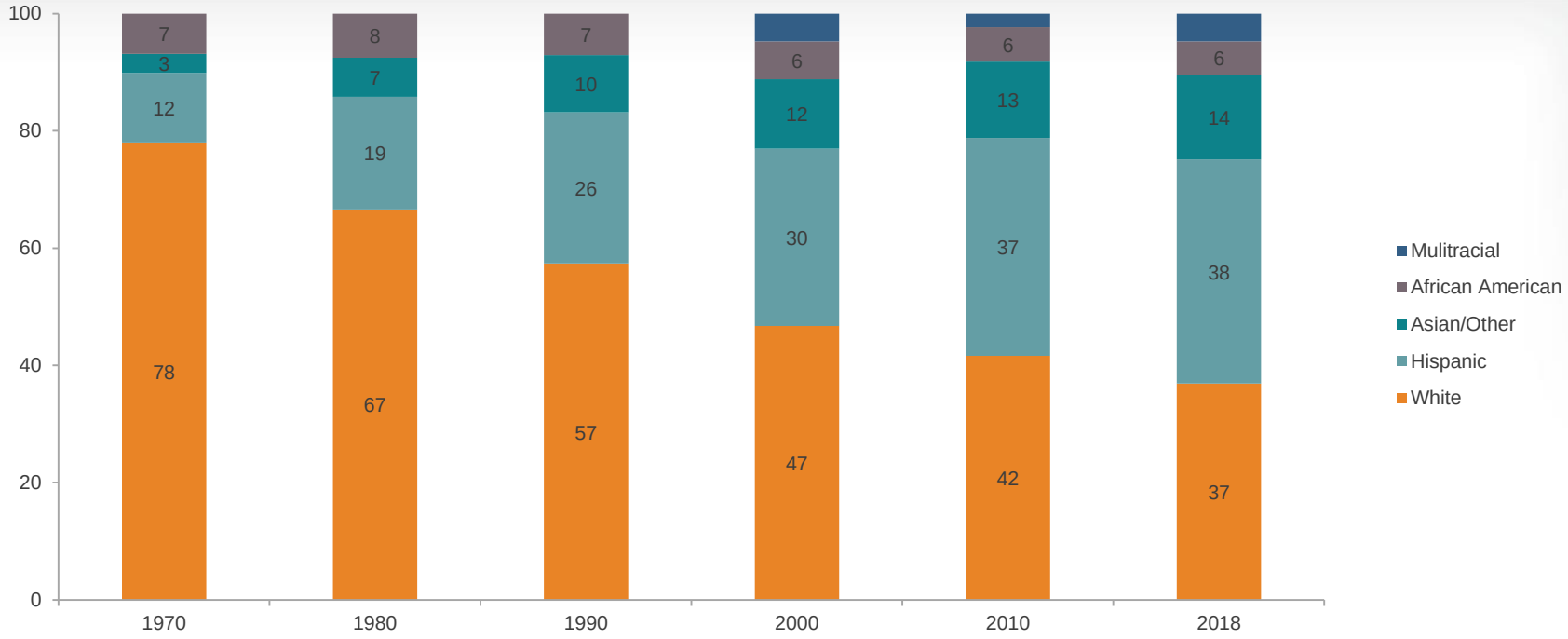
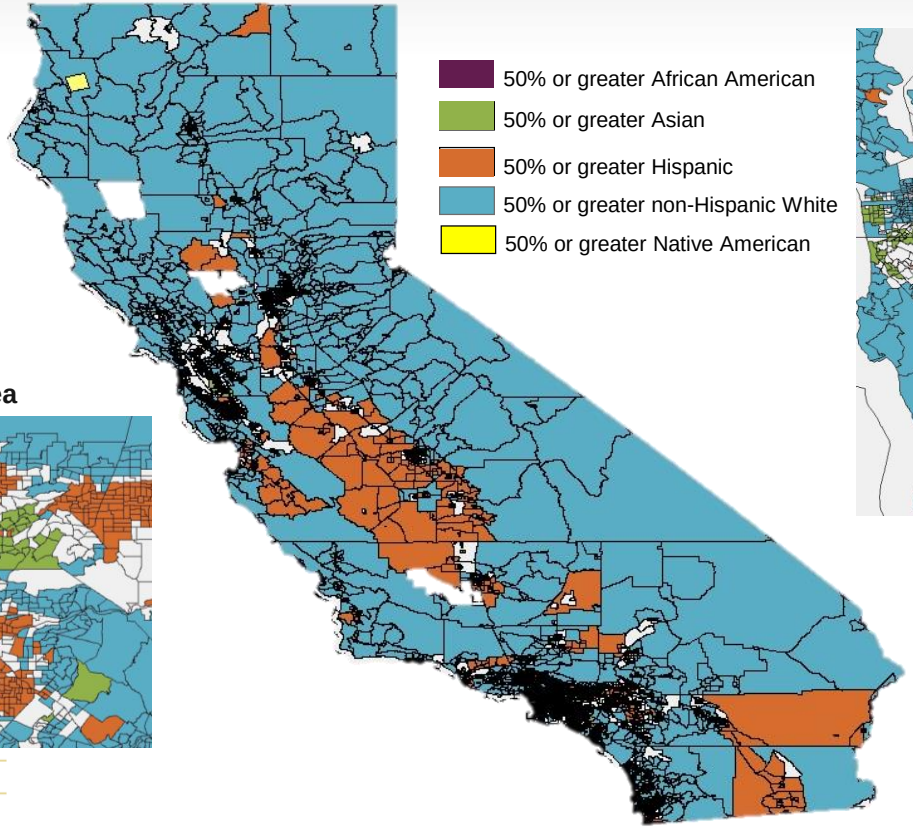
California Population by Race/Ethnicity 1970-2018

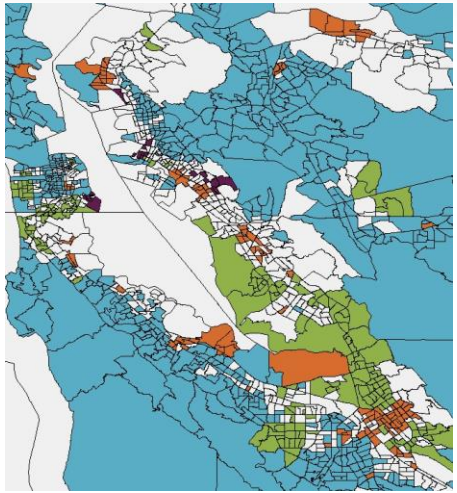


Source: United States Census Bureau, decennial censuses and American Community Survey

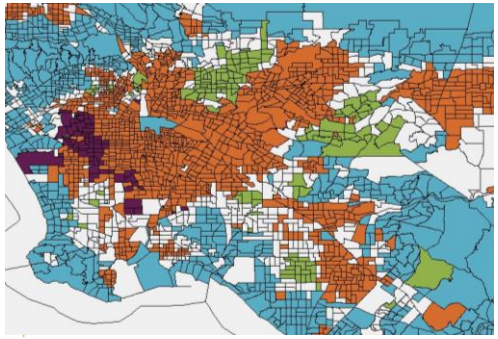
Ethnic Majorities by Census Tract, 2010



San Francisco Bay Area



Los Angeles Area



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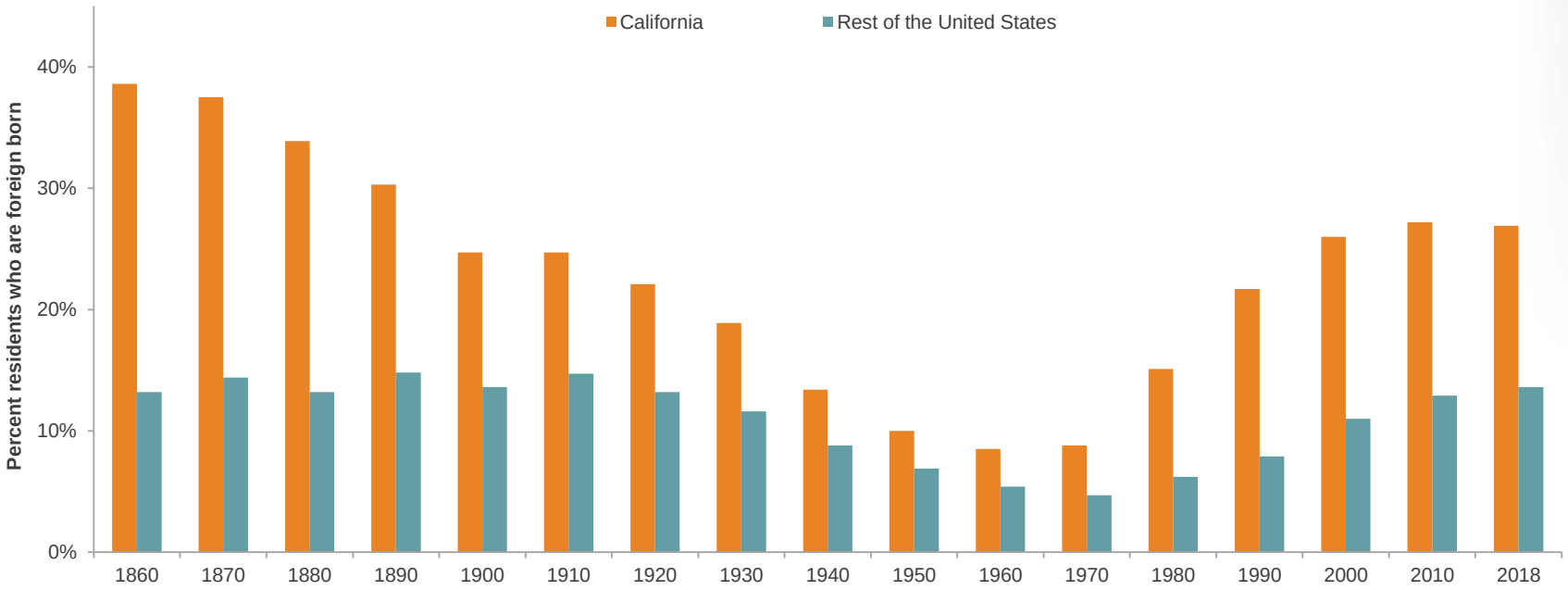
Percent Foreign Born Population 1880-2018



Latin America is the Leading Source of Immigrants

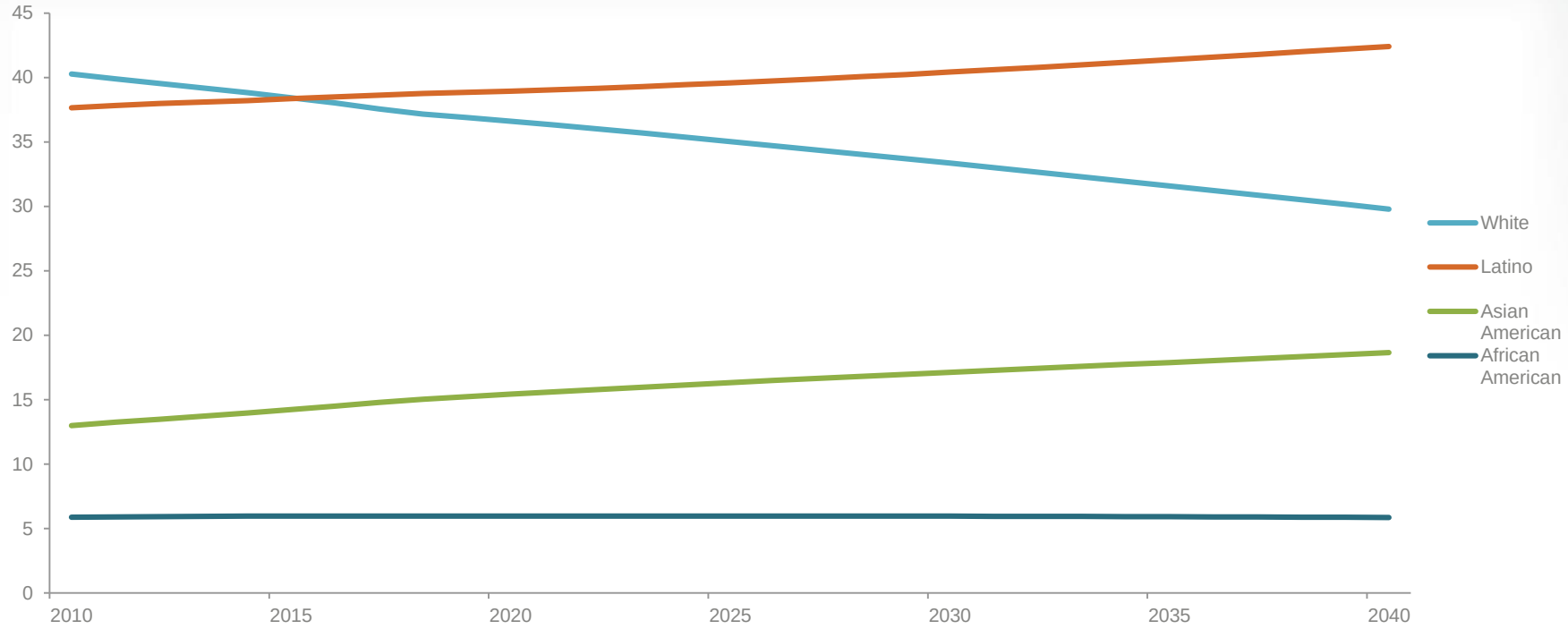
Latin America	5,302,000	(50%)
Asia	4,222,000	(40%)
Europe	684,000	(6%)
Africa	202,000	(2%)
Canada	130,000	(1%)
Oceania	85,000	(1%)

Source: 2018 American Community Survey

Immigrants Come to California from Dozens of Countries

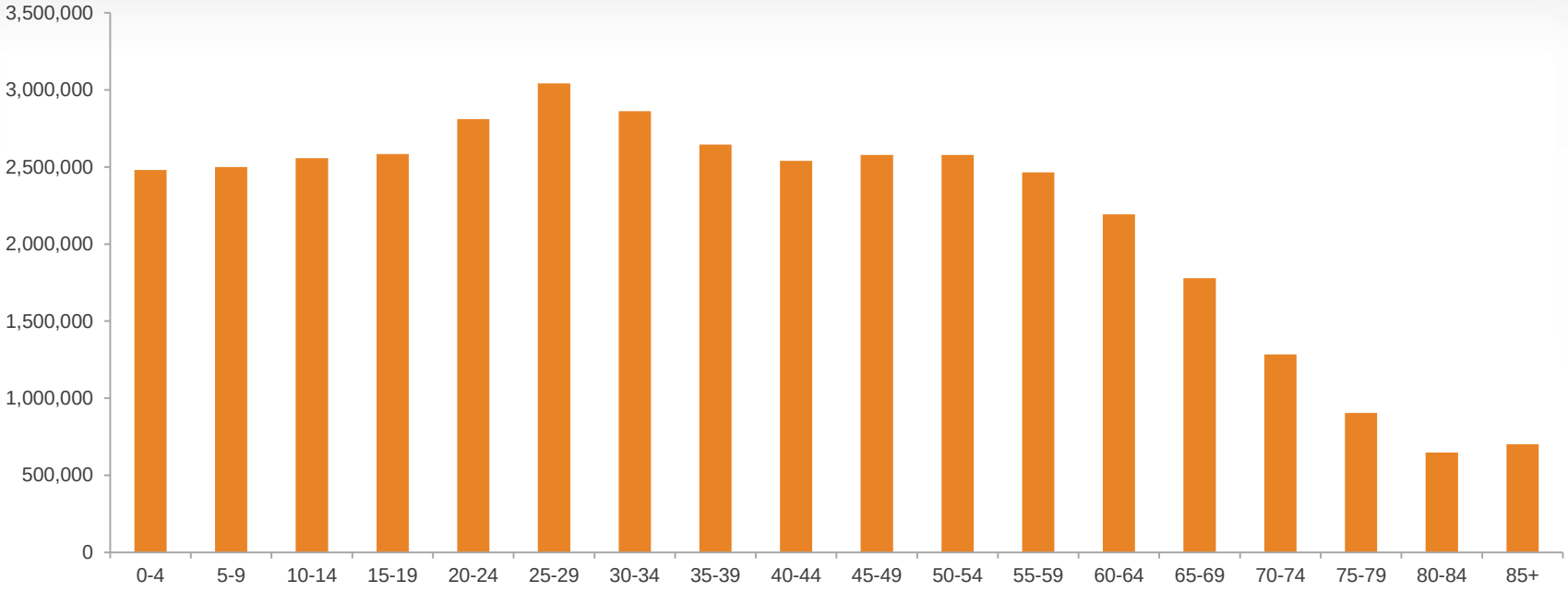
Mexico	Iran	Thailand	Pakistan	Cuba	Burma	Belize	Jordan
China	Taiwan	Russia	Iraq	Argentina	Romania	Ireland	Saudi Arabia
Philippines	Canada	Nicaragua	Colombia	Israel	Ethiopia	Tukey	Sweden
Vietnam	Japan	Honduras	Indonesia	Lebanon	Nigeria	Chile	Nepal
India	Hong Kong	England	Brazil	Afghanistan	Ecuador	Malaysia	Costa Rica
El Salvador	Germany	Cambodia	France	Italy	Poland	Spain	Greece
Korea	Peru	Ukraine	Egypt	Portugal	Australia	Bangladesh	Sri Lanka
Guatemala	Armenia	Laos	Fiji	Syria	Netherlands	Jamaica	Hungary

Latinos have become the single largest ethnic group



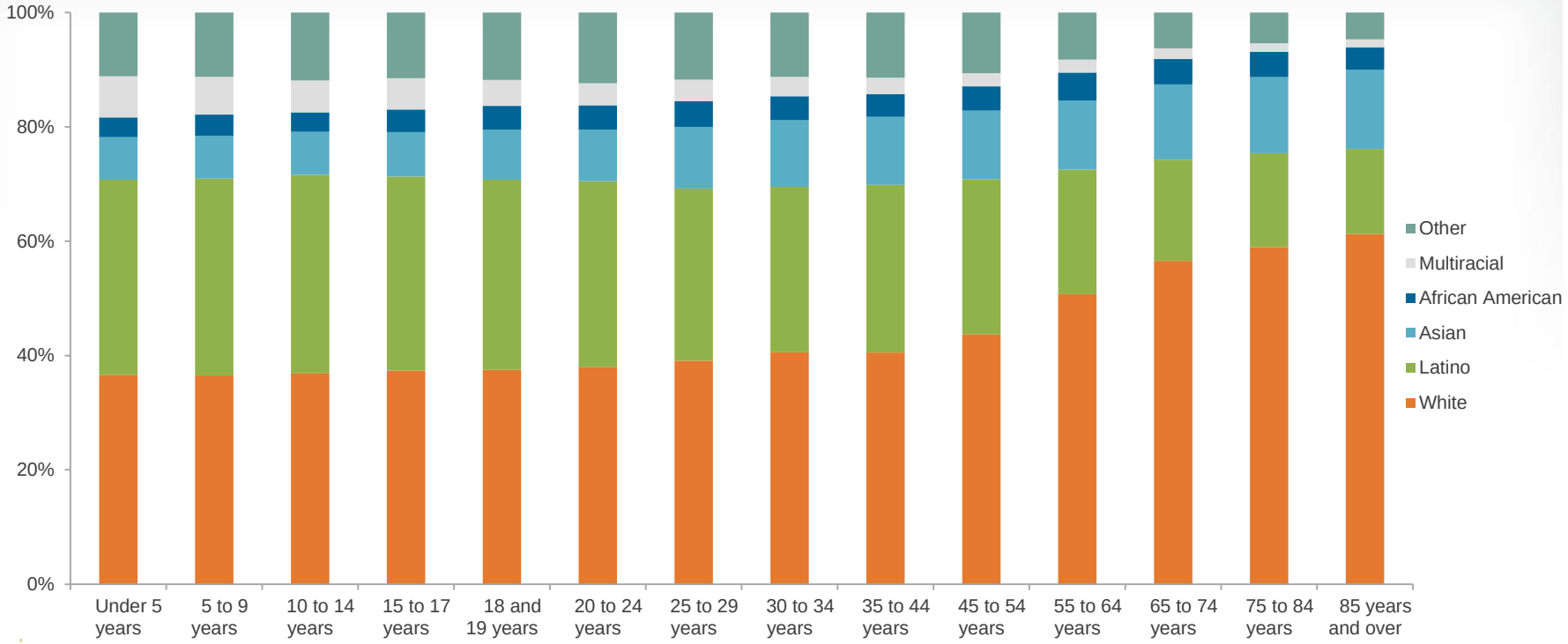
Source: CA Department of Finance

California Population by Age, 2018



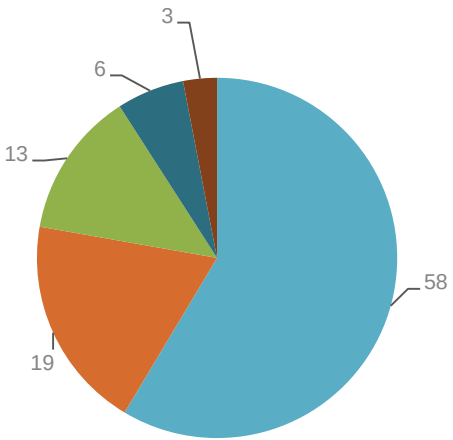
Source: American Community Survey

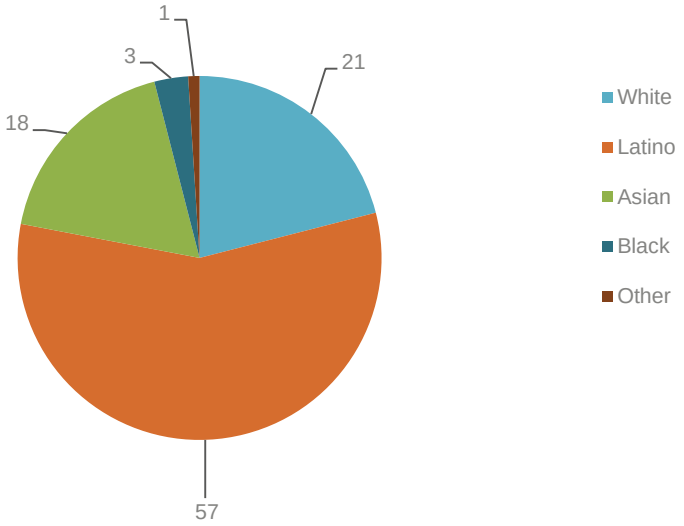
Younger Californians are much more diverse



Source: American Community Survey

California's diversity is not represented among its voters





Source: PPIC Statewide Survey

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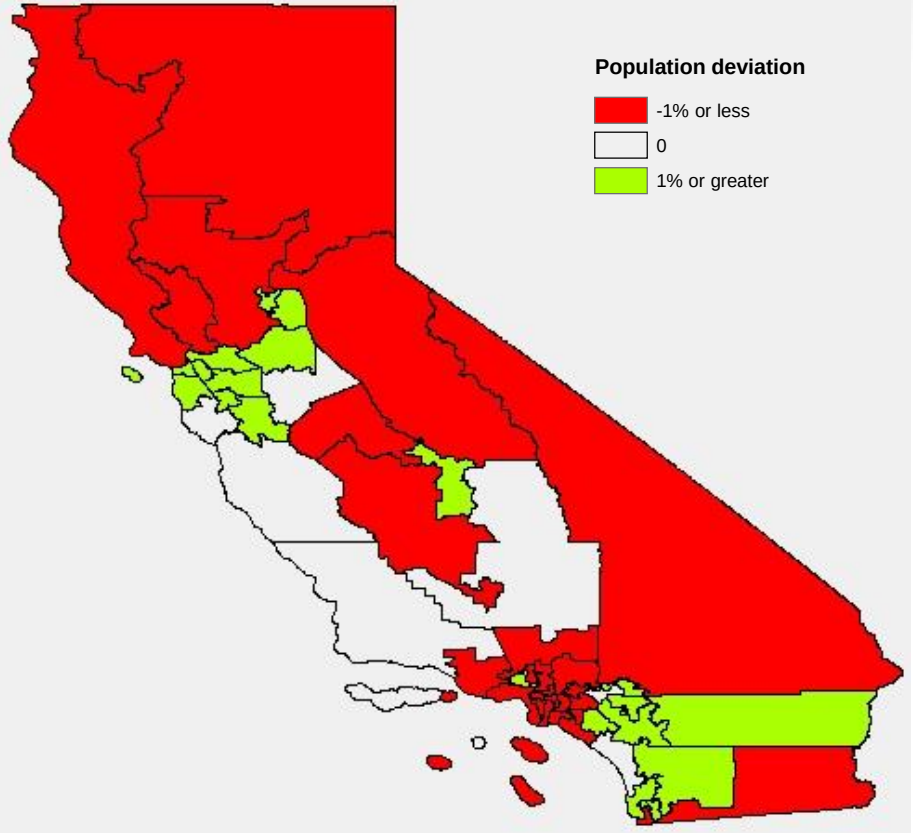
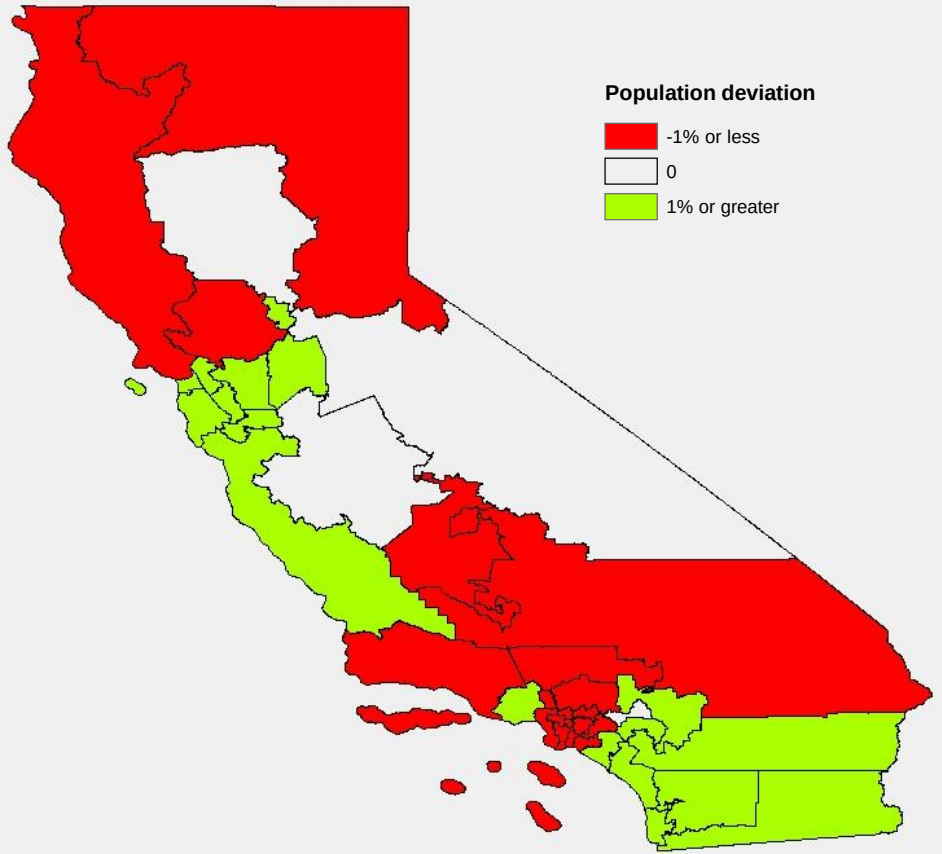
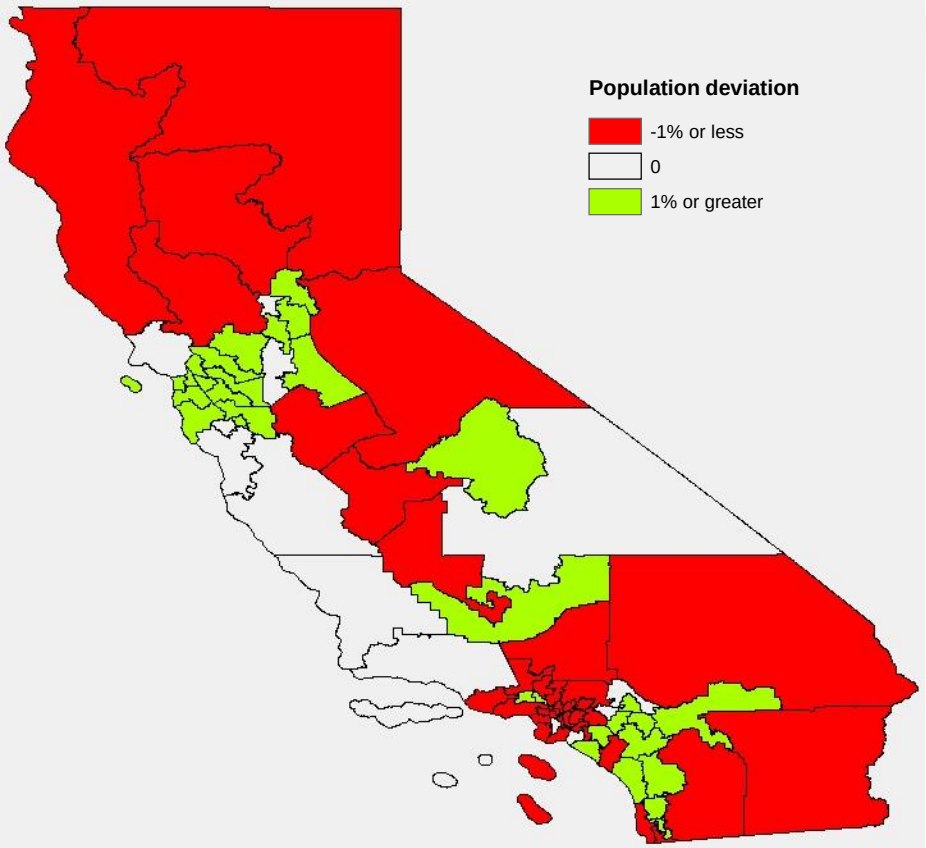
Population deviations: US Congressional districts



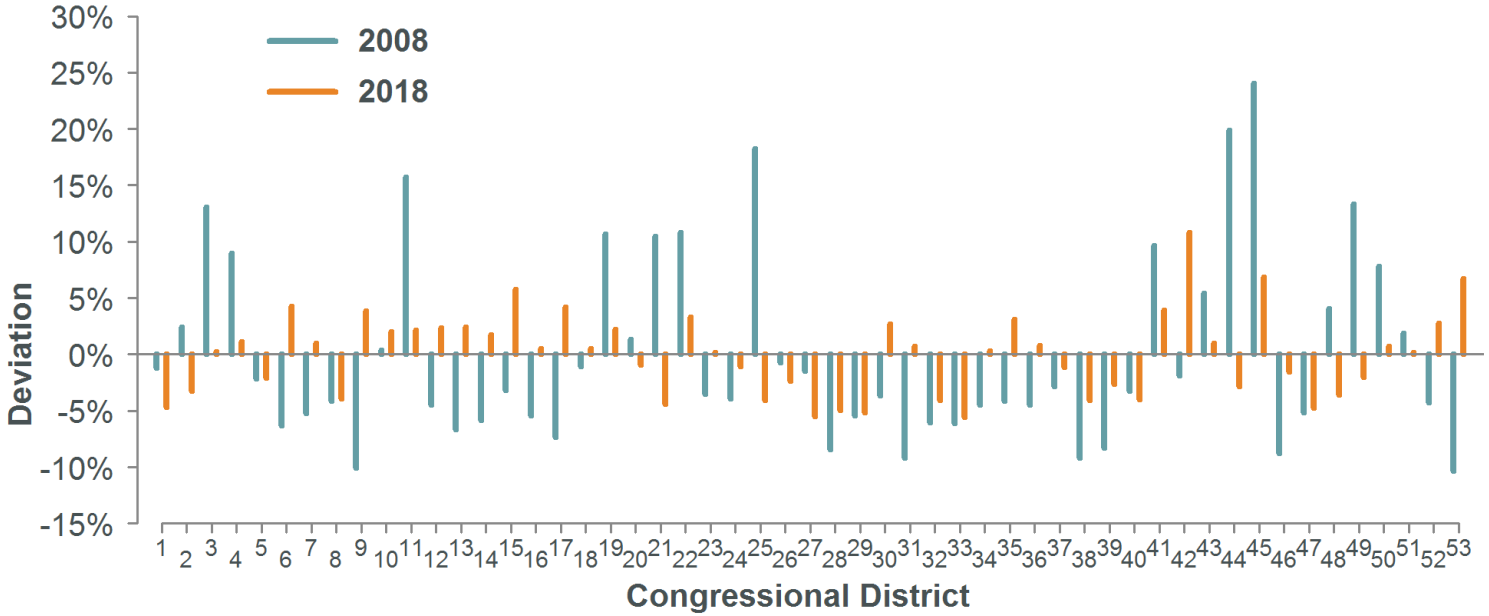
Population deviations: California Senate districts



Population deviations: California Assembly districts



Population deviations are smaller so far this cycle



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The CRC districts had to meet several goals

- Equal population
- Compliant with Voting Rights Act
- Geographically contiguous, compact, and respectful of communities with common interests
- Nested: two state assembly districts in each state senate district
- Not skewed by party or incumbent favoritism

VRA: new plans improved Latino, Asian-American representation

Majority-minority districts by plan

	2001 Plan	2011 Draft Plan	2011 Final Plan
African-American	0	0	0
Latino	18	19	26
Asian-American	0	0	1

Cities: modest decline in split cities

Share of cities split between districts

	2001 Plan	2011 Draft Plan	2011 Final Plan
Assembly	11%	8%	8%
Senate	4%	6%	4%
Congress	6%	12%	9%

Counties: decline in split counties for Senate

Number of counties split between districts

	2001 Plan	2011 Draft Plan	2011 Final Plan
Assembly	27	27	28
Senate	25	26	20
Congress	24	27	25

Compactness: districts became far less convoluted

Average district compactness (Polsby-Popper)

	2001 Plan	2011 Draft Plan	2011 Final Plan
Assembly	0.20	0.25	0.26
Senate	0.12	0.21	0.23
Congress	0.13	0.23	0.23

Nesting: some remaining improvement after dramatic change

	2001 Plan	2011 Draft Plan	2011 Final Plan
Average number of Assembly districts per Senate district	6.35	2.95	4.95

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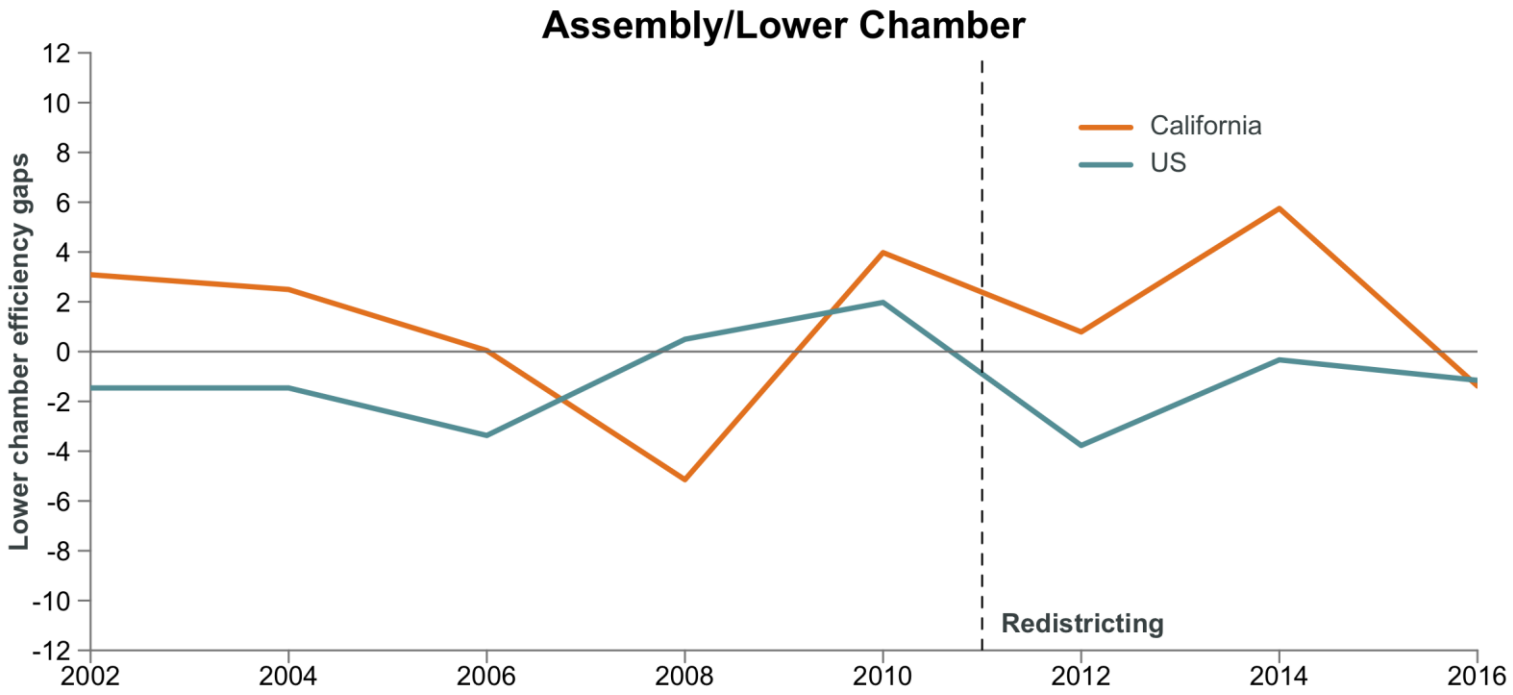
Fair and competitive plans were hoped for but not required

- Fairness to the major parties
  - No large gaps between the overall number of votes and seats won
- Competitive races in most or all districts
  - 45%–55% vote share for each major-party candidate

Partisan fairness: Efficiency gap trends over time are noisy



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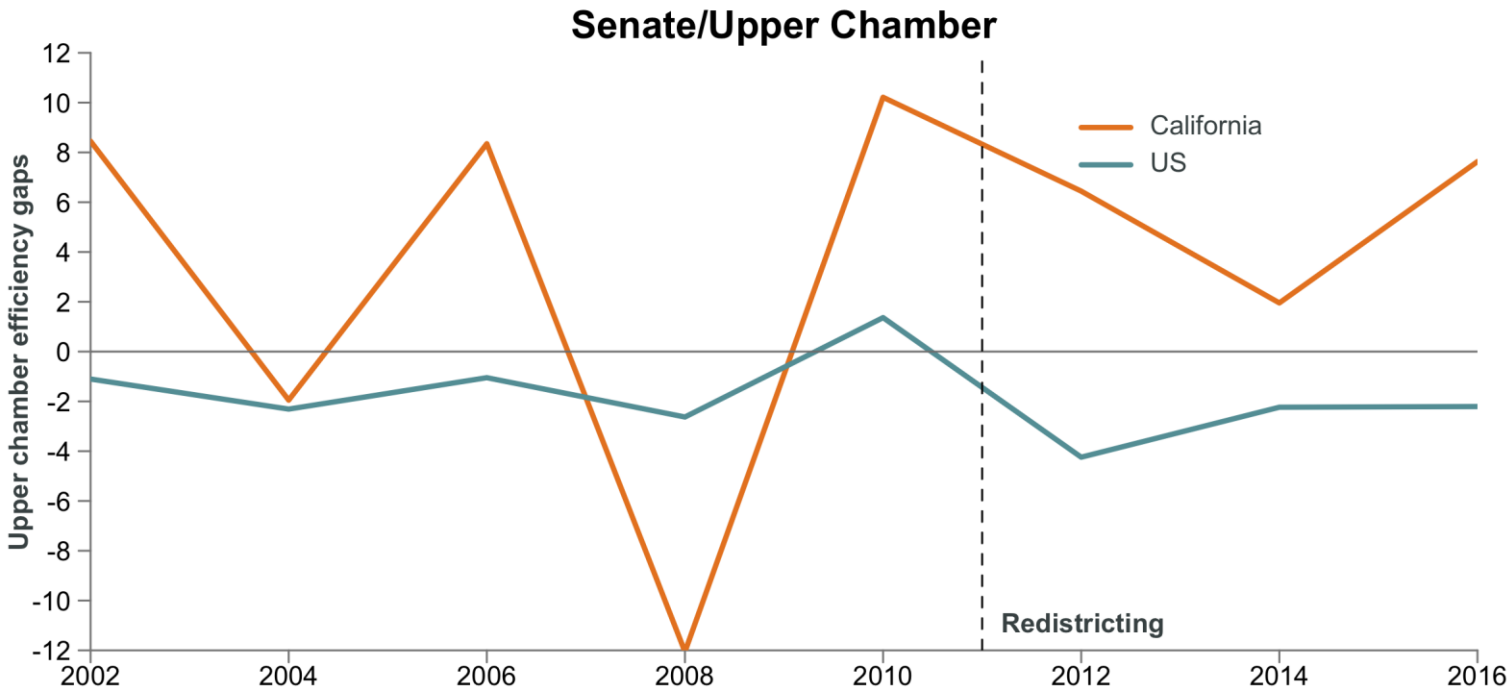

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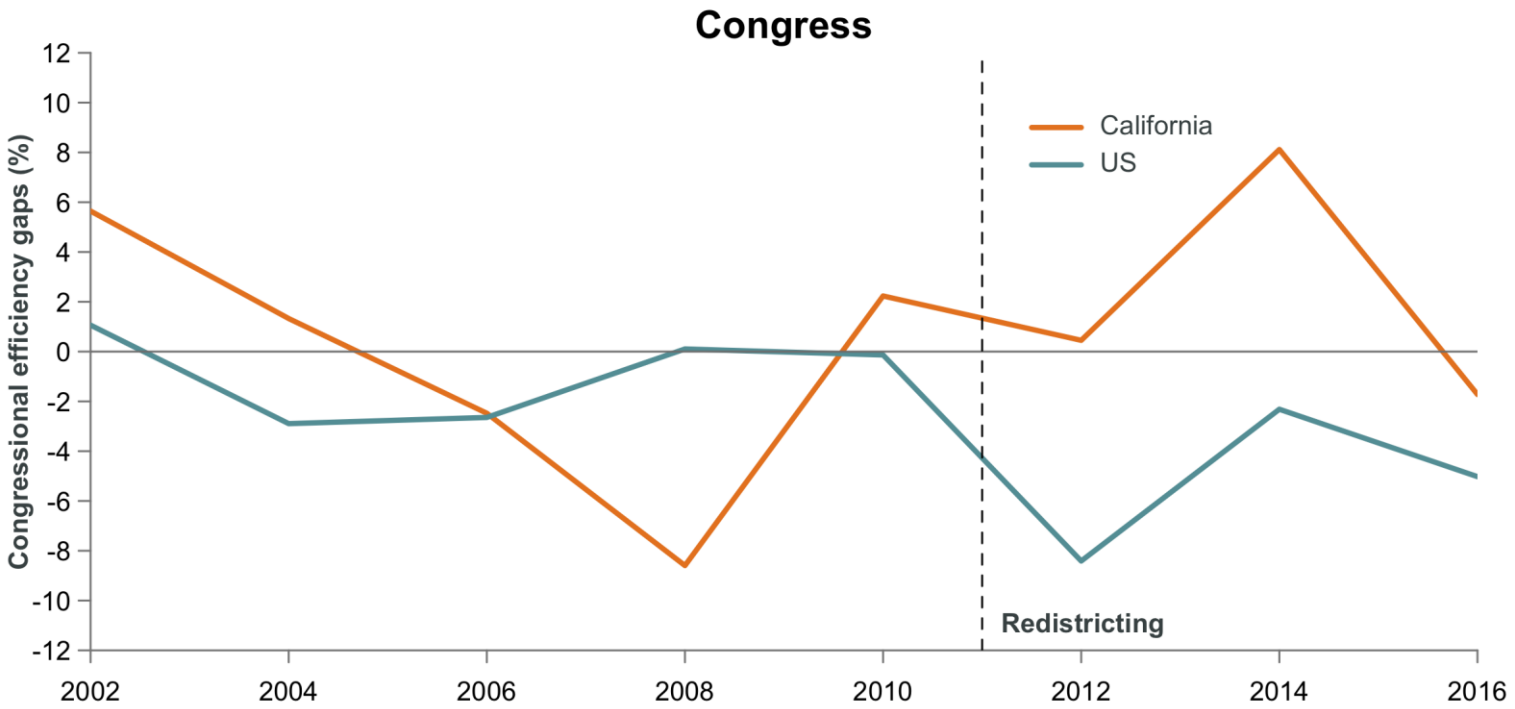
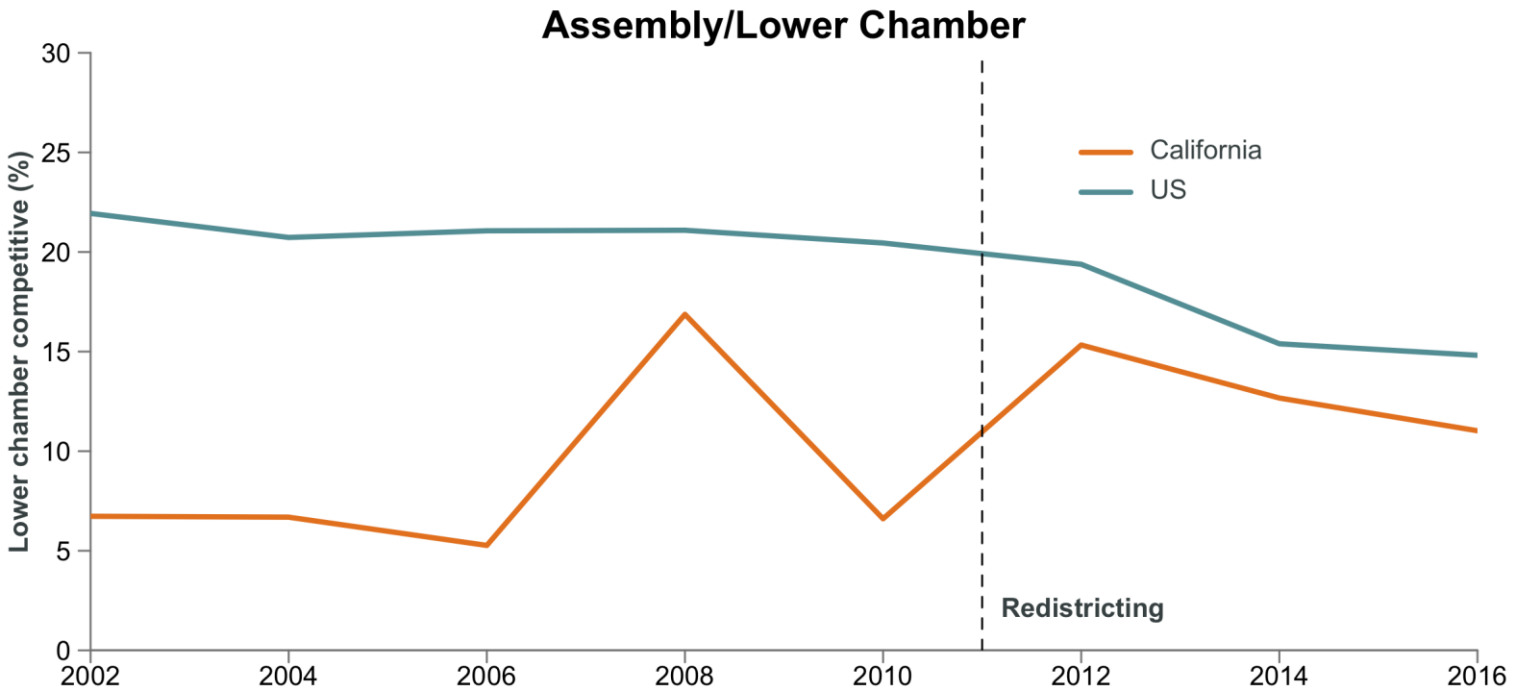
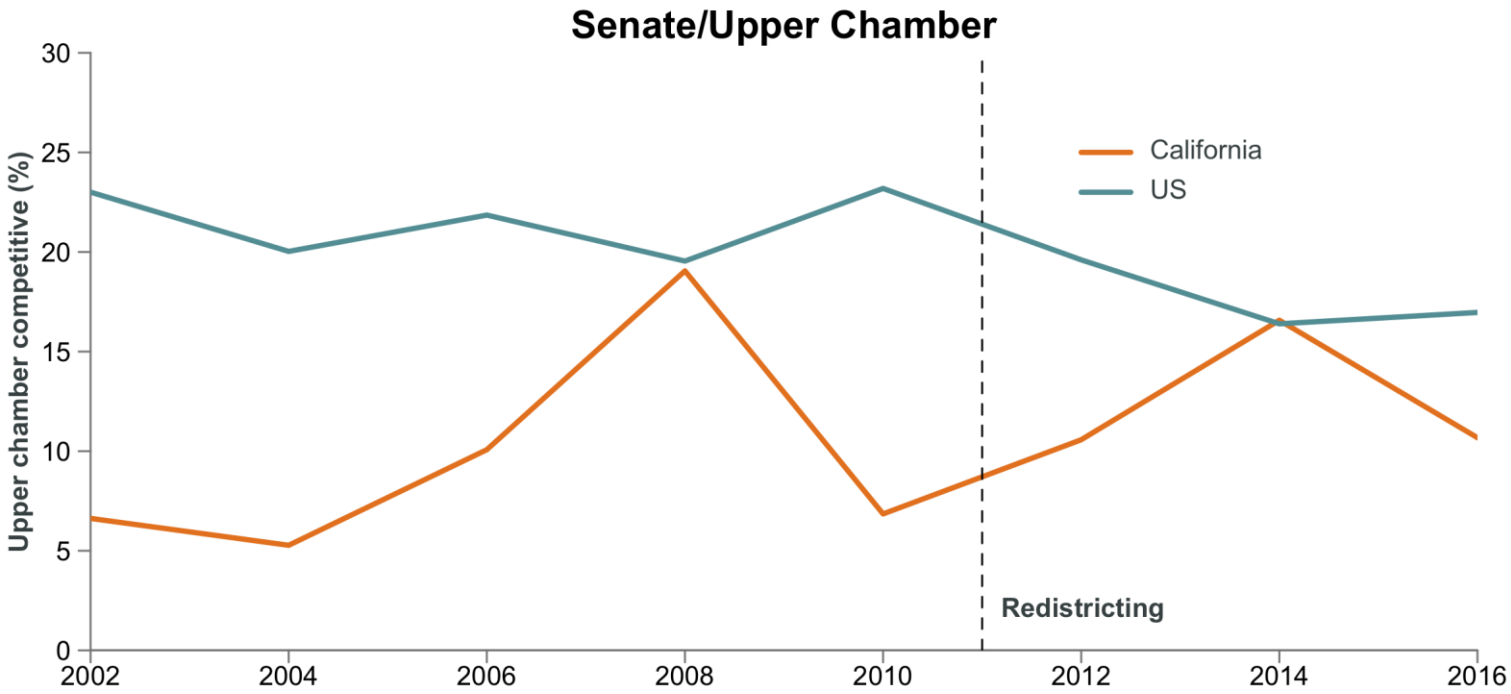


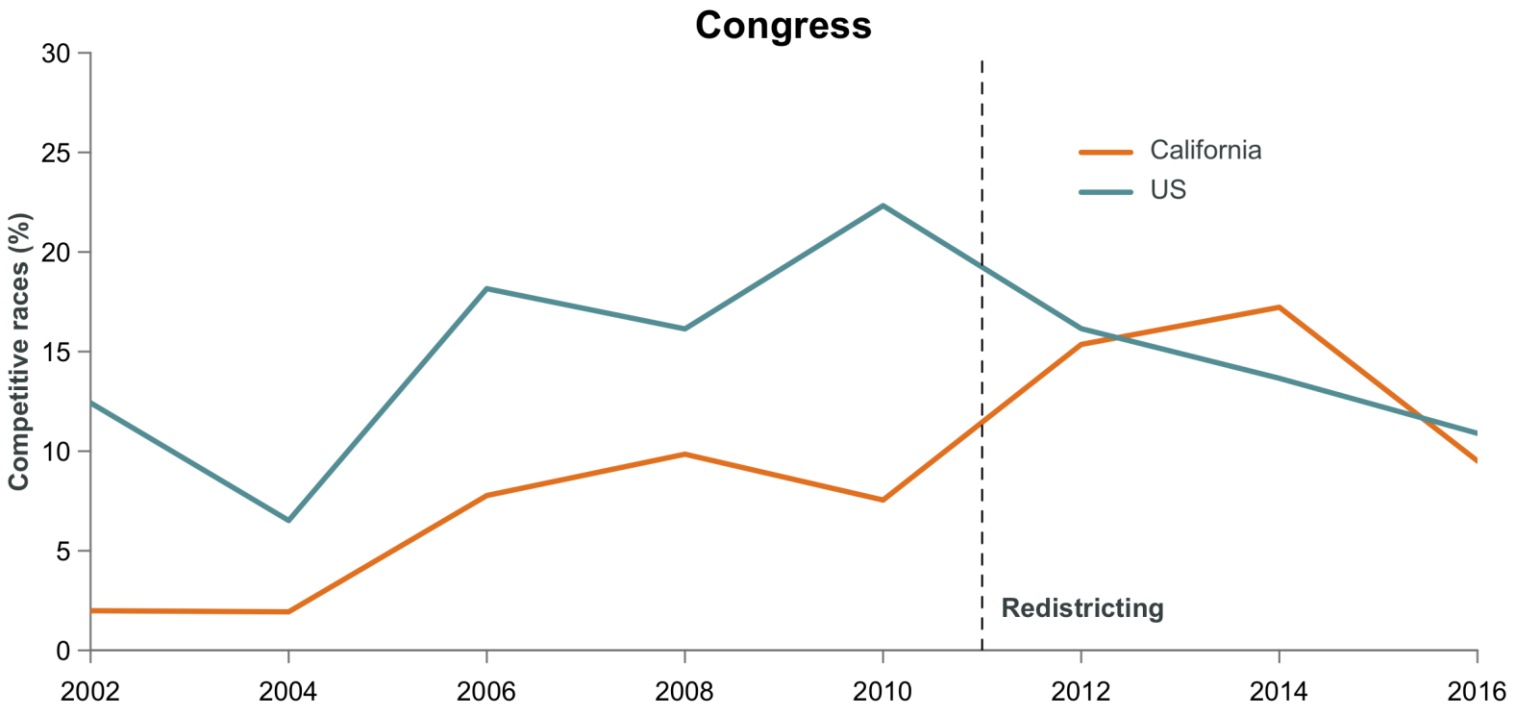
Competition: CRC assembly districts are consistently more competitive than the districts drawn in 2001



Competition: CRC senate districts are consistently more competitive



Competition: CRC congressional districts are consistently more competitive



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Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.