Appendix C

California Secretary of State

Voter's Choice Act Report for the 2020 Primary and General Elections

University of California, Los Angeles

Voting Rights Project

Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties

Appendix C

Secretary of State's Office Summary

Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties

The Secretary of State's office commissioned research from the Voting Rights Project of the University of California, Los Angeles to improve the understanding of California voter demographics in Voter's Choice Act (VCA) counties in the 2020 General Election. UCLA's report, *Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties*,[1] used the Bayesian Improved Surname Geocoding (BISG) to provide a probability assessment of the voter's race or ethnicity. BISG relies on surname analysis and census block racial demographics to estimate the probability of a voter's race or ethnicity.[2] When using this method, the estimated number of White, Latino, Asian American and Pacific Islander (AAPI), and Black voters along with voters of other non-categorized races/ethnicities in VCA counties can be tabulated and cross-analyzed by the share of total registered voters, the number of voters, voter turnout rates, and vote by mail usage.

Background

No state requirement exists to self-report race or ethnicity when registering to vote. As a result, the state's centralized voter registration database, VoteCal, does not capture comprehensive data on voters' racial and ethnic backgrounds. At the time of the 2020 General Election, only 20% of registered voters reported their race or ethnicity.[3] However, VoteCal does capture data on

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[1] Barreto, M., Collingwood, L., Frasure, L., Rios, M., Waknin, S. (March 2022). *Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties.* University of California, Los Angeles Voting Rights Project.

[2] Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties (P. 3). This method of analysis of race and ethnicity of voters is probability based, which may result in a margin of error that should be cross examined for reliability.

[3] Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties (P. 3)

language preference to provide voters with a ballot in the language of their choice.

The statutory framework for the analysis in this report derives from Section 4005(g)(1)(A)(i)-(xii) of the California Elections Code.[4] This statute obligates the state to report on several election characteristics by the category of race and ethnicity.

Findings

Applying BISG to the 2020 General Election voter file highlighted several major findings:[5]

- There are more non-White registered voters across all fifteen VCA counties than White registered voters.
- Approximately 5.60 million, or 51.9%, of the 10.79 million registered voters in all fifteen VCA counties are a race or ethnicity other than White.
- The average voter turnout was 78.2% among all VCA counties. Only three VCA counties had a turnout rate under 80%.
- Los Angeles County had a turnout rate of 74.2%. When Los Angeles County is included in the aggregate data, the average turnout aggregate rate is lowered.
- Data revealed that the voter turnout gap between White-Latino voters yielded the largest significant difference between any two groups at 6.6 points.
- All voters in VCA counties who participated in the 2020 General Election preferred voting by mail.

[4] Elections Code Section 4005(g)(1)(A)(i)-(xii) provides: Within six months of each election conducted pursuant to this section or Section 4007, the Secretary of State shall report to the Legislature, to the extent possible, all of the following information by categories of race, ethnicity, language preference, age, gender, disability, permanent vote by mail status, historical polling place voters, political party affiliation, and language minorities as it relates to the languages required under subdivision (a) of Section 14201 and Section 203 of the federal Voting Rights Act of 1965 (52 U.S.C. Sec. 10101 et seq.): (i) Voter turnout. (ii) Voter registration. (iii) Ballot rejection rates. (iv) Reasons for ballot rejection. (v) Provisional ballot use. (vi) Accessible vote by mail ballot use. (vii) The number of votes cast at each vote center. (viii) The number of ballots returned at ballot drop-off locations. (ix) The number of ballots returned by mail. (x) The number of persons who registered to vote at a vote center. (xi) Instances of voter fraud. (xii) Any other problems that became known to the county elections official or the Secretary of State during the election or canvass.

[5] Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties (p. 4)

- Latino voters utilized in-person voting at higher rates in the largest VCA counties. The five largest VCA counties are: Los Angeles, Orange, Santa Clara, Sacramento, and Fresno.[6]
- A trend amongst most voters across VCA counties is their choice to cast their ballot by mail. This trend remains consistent across all age groups.
- As the 2020 General Election took place amidst an unprecedented health pandemic, voters aged 65 years or older were most likely to vote by mail, which could be a result of health risks posed by the COVID-19 pandemic.
- Voters more likely to vote in-person using 'same-day registration,' or conditional voter registration, were in the youngest age group, 18 to 29.

Recommendation

The Voting Rights Project of the University of California, Los Angeles did not provide any recommendations in this report.

[6] Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties (p. 11)

Utilizing Bayesian Improved Surname Geocoding (BISG) to Improve Our Understanding of California Voter Demographics in Voter's Choice Act Counties

By

UCLA Voting Rights Project
In Partnership with
the UCLA Ralph J. Bunche Center and the California Secretary of State

This report was written by the UCLA Voting Rights Project, in association with the UCLA Bunche Center for African American Studies and Dr. Loren Collingwood, and in partnership with the California Secretary of State's office.

About the UCLA VRP
The UCLA Voting Rights Project (UCLA VRP) is a nonpartisan, educational project housed within the Latino Policy and Politics Initiative (LPPI) at the University of California, Los Angeles. The UCLA VRP educates undergraduate, graduate, and professional degree students through our flagship voting rights clinic.

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I. Introduction

Researchers at the University of California, Los Angeles (UCLA) Voting Rights Project used Bayesian Improved Surname Geocoding (BISG) to improve our understanding of California voter demographics in Voter's Choice Act (VCA) counties. BISG is a technique that relies on a combination of Census surname analysis and Census block racial demographics to provide an overall probability assessment of the voter's race or ethnicity.

While voters in California may choose to report their race or ethnicity when registering to vote, only about one in five voters (20%) have indicated their race or ethnicity on the 2020 General Election voter file. The lack of racial and ethnic data poses limitations for researchers and policymakers in California. First, the Secretary of State (SOS) cannot attain an inclusive understanding of voter turnout by different racial communities, limiting the SOS's ability to have a more tailored outreach and campaign to reach underserved populations. Second, the current voter file data does not provide meaningful insights about the race and ethnicity of those 80% of voters whose race is not self-reported.

BISG is one of the only methods to precisely estimate race and ethnicity aside from surname matching. While surname matching has been successfully used to estimate the race of voters who have Spanish or Asian surnames, this method can overlook voters of other races or ethnicities, including Black voters. Further, PDI or other surname estimates cannot tell us more about ethnicities besides broad generalizations, including possibly what language a voter may speak.

A more comprehensive understanding of the race and ethnicity of California voters will allow policymakers to better understand how different communities are impacted by changes in voting policy and the electoral environment.

For this project, the initial pilot was performed in Alameda County, one of the most diverse counties in the entire state. This report will provide an account of the most significant findings shown by the BISG analysis contrasting the VCA counties. Status as a VCA county is based on voluntary participation, so the number of VCA counties is subject to change depending on the election year. This report analyzes the fifteen counties that were VCA counties during the 2020 election cycle: Amador, Butte, Calaveras, El Dorado, Fresno, Los Angeles, Madera, Mariposa, Napa, Nevada, Orange, Sacramento, San Mateo, Santa Clara, and Tuolumne.

All the estimates throughout this report refer to data retrieved from California's 2020 General Election voter file. The estimates provided throughout this report are for voters with addresses matched during the geocoding process that places them in a Census Block based on the 2020 Decennial Census. The BISG analysis was performed on the California voter file last updated on July 19, 2021, this is approximately eight months after the election, and some voters may have moved in or out of California. Approximately 2% of registered voters could not be geocoded and were removed from the final estimates. Addresses that could not be geocoded are generally from overseas and military voters, voters that moved since the election, voters with irregular addresses, or voters in recently developed housing tracts not yet on the Census geocoding database.

Since the voter file provided by VoteCal only includes registered voters, all of the percentage statistics in this report are based on registered voters as of the 2020 General Election and not eligible voters in California.

II. Executive Summary and Findings

Utilizing BISG on the 2020 General Election voter file provided the following insights and results:

1. As of the 2020 General Election, the majority of registered voters across all VCA counties are non-White.
2. Of the 10.79 million registered voters in VCA counties, approximately 5.60 million or 51.9%, are of a race or ethnicity other than White.
3. Across all VCA counties, voter turnout was 78.2% for the 2020 General Election. 12 of 15 VCA counties had a turnout rate over 80%.
4. Los Angeles County, which comprises more than half of VCA counties' electorate, had a turnout of 74.2% - lowering the aggregated rate.
5. The most significant disparity of voter turnout between any two groups was the White-Latino turnout gap at 9.8 points. White-Black and White-AAPI turnout gaps were 5.2 and 4.3 points. Black and AAPI voters turned out at similar rates as the VCA counties' average.
6. Voting-by-mail was the preferred method of participation across all groups in all counties.
7. In-person voting was most utilized by Latino voters in the largest VCA counties.
8. Regardless of age, most voters chose to cast their ballot by-mail.
9. Voters 65 years and older most utilized vote-by-mail, which could result from the health risks posed by the COVID-19 pandemic.
10. Voters 18 to 29 were more likely to vote in-person using 'same-day registration' or CVR.

III. Overview of BISG

BISG was developed by demographic experts and has been widely published and applied in the domain of public health. Indeed, BISG has been published and accepted in the scientific community for over a dozen years (e.g., Elliott et al. 2008; 2009). For example, it has been used to analyze racial disparities and treatment in healthcare[1] and epidemiology,[2] and has been used by the Consumer Financial Protection Bureau to assess racial discrimination in residential and consumer finance.[3] In the years since, political scientists have adapted BISG and used it specifically in the study of voter files. A number of leading scholars have used BISG to evaluate political activity and voter behavior across a number of jurisdictions.[4] One study in 2016 used BISG to analyze 10 million Florida voters at the precinct level and validated its accuracy against the self-reported race of those voters.[5] The study's authors, Kosuke Imai of Harvard and Kabir Khanna of Princeton, concluded that BISG "enables

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[1] Dzifa Adjaye-Gbewonyo et al., *Using the Bayesian Improved Surname Geocoding Method (BISG) to Create a Working Classification of Race and Ethnicity in a Diverse Managed Care Population: A Validation Study*, 49 HEALTH SERV. RES. 268 (2013).

[2] Stephen F. Derose et al., *Race and Ethnicity Data Quality and Imputation Using U.S. Census Data in an Integrated Health System*, 70 MED. CARE RES. & REV. 330 (2012).

[3] *See United States v. City of Eastpointe*, 378 F. Supp. 3d 589, 600 (E.D. Mich. 2019).

[4] Bernard L. Fraga, *Candidates or Districts? Reevaluating the Role of Race in Voter Turnout*, 60 AM. J. POL. SCI. 97, 102 (2016); Ryan D. Enos, *What the Demolition of Public Housing Teaches Us about the Impact of Racial Threat on Political Behavior*, 60 AM. J. POL. SCI. 123 (2016); Bernard L. Fraga, THE TURNOUT GAP: RACE, ETHNICITY, AND POLITICAL INEQUALITY IN A DIVERSIFYING AMERICA 223 (2018); Jacob M. Grumbach & Alexander Sahn, Race and Representation in Campaign Finance, 114 AM. POL. SCI. R. 206 (2020).

[5] Kosuke Imai & Kabir Khanna, *Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Records*, 24 POLITICAL ANALYSIS 263, 271.

academic researchers and litigators to conduct more reliable inference in states where registered voters are not asked to report their race."[6]

This technique is now commonly used in social science analysis of voting patterns, has been published in multiple academic journals and validated by federal courts as an appropriate method to understand racial/ethnic voting patterns. Indeed, two of the authors of this analysis, Dr. Matt Barreto and Dr. Loren Collingwood, recently adapted BISG for use in voting rights litigation to more accurately identify Black, White, and Latino voters.[7] Additionally, the State of Washington recently utilized BISG during a performance audit to evaluate Washington's ballot rejection rates in select counties.[8]

BISG relies on a combination of census surname analysis and census block-level racial demographics to provide an overall probability assessment of the voter's race or ethnicity. Beyond surname, the latest approach also considers first and/or middle names to further improve accuracy. Census data matched to precincts is widely used for understanding precinct racial demographics, and surname analysis is regularly used against the voter file to understand race and ethnicity. By using both sources of data, it is possible to gain a more precise understanding of voter demographics—two pieces of evidence, instead of just one, provides more reliable estimates by far.

IV. General Findings and Results[9]

The average voter turnout[10] across VCA Counties during the 2020 General Election was 78.5%. As shown in Figure 1 below, only Fresno, Los Angeles, and Madera had turnout rates lower than the VCA counties' average.

Los Angeles is the largest county in California, and with a turnout rate of 74.2%, it lowered the overall VCA counties' turnout rate. In fact, Los Angeles County accounted for approximately 61% of the registered voters in VCA counties that did not vote in the 2020 General Election. Only Fresno had a lower turnout than Los Angeles, with a rate of 71.8%. Conversely, Nevada County had the highest turnout rate among VCA counties at 85.9%.

Figure 1: Turnout for the 2020 General Election by VCA County

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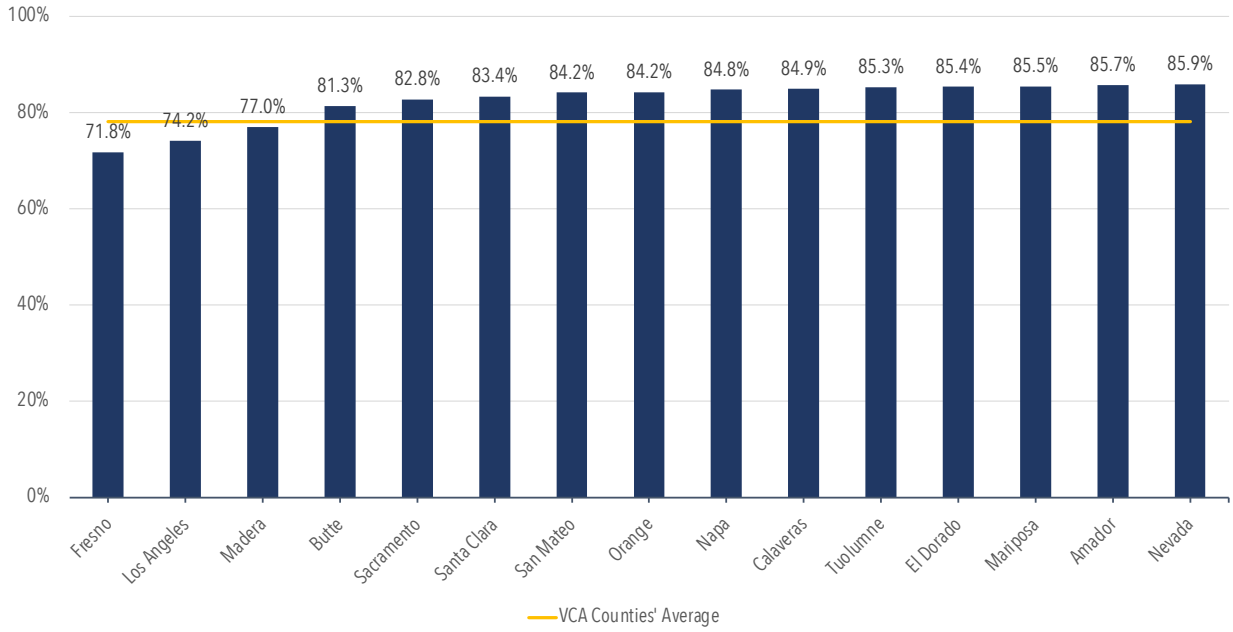
[6] *Id.*

[7] *See Clerveaux v. E. Ramapo Cent. Sch. Dist.,* 984 F.3d 213, 219 (2d Cir. 2021)("We further hold that the district court did not err in concluding that the analysis using BISG is reliable and superior to analysis using CVAP.").

[8] The performance audit is available here: https://portal.sao.wa.gov/ReportSearch/Home/ViewReportFile?arn=1029711&isFinding=false&sp=false.

[9] Individual county results are provided for in Appendix A, attached to this report.

[10] When this report references voter turnout, all turnout statistics provided refer to the registered voters universe as of the 2020 general election.



BISG estimates reveal that the registered voters of VCA counties are majority non-White with a 51.9% share of the electorate. Five counties have a non-White registered electorate of over 50%, including Los Angeles, Santa Clara, San Mateo, and Madera.

Table 1 below provides a more detailed look at the composition of these minority-majority counties in order of descending non-White voters. In Fresno, Madera, and Los Angeles, Latino voters comprise most of the non-White registered electorate. In Santa Clara and San Mateo, AAPI voters are most of the non-White voters. White voters remain the plurality of the electorate across all VCA counties.

Table 1: Share of the Registered Electorate by Race and Ethnicity in Majority Non-White VCA Counties

	Total Registered Voters	White	Black	Latino	AAPI	Other
Fresno	506,758	43.2%	7.7%	38.1%	8.9%	2.1%
Los Angeles	5,625,109	43.3%	7.9%	35.8%	10.9%	2.2%
Santa Clara	942,165	43.8%	6.3%	19.8%	27.5%	2.5%
San Mateo	440,516	46.2%	1.8%	19.2%	30.0%	2.8%
Madera	69,921	48.1%	8.0%	38.1%	3.7%	2.0%

Novel BISG subethnic analysis provides even more comprehensive estimates for VCA counties with APPI registered voter populations over 5,000. Los Angeles, Orange, Santa Clara, San Mateo, Sacramento, Fresno, El Dorado, and Butte counties account for 99.3% of registered AAPI voters in VCA counties. As shown in Table 2, Chinese voters make up the largest share of registered AAPI

voters at 26.2%, followed by Vietnamese at 18.9%, Indian at 9.8%, Korean at 9.2%, Filipino at 7.9%, and Japanese at 4.0%. Approximately 24% of AAPI registered voters belong to other subethnic groups.

Table 2: Subethnic Estimates for VCA Counties with a High-Density of AAPI Registered Voters

	AAPI Registered Voters	Vietnamese	Filipino	Indian	Japanese	Chinese	Korean	Other
Total	1,501,692	18.9%	7.9%	9.8%	4.0%	26.2%	9.2%	24.1%
Los Angeles	611,930	10.0%	9.6%	7.0%	5.1%	30.3%	13.0%	25.0%
Orange	335,927	36.4%	4.9%	7.3%	3.4%	17.2%	11.4%	19.5%
Santa Clara	259,371	29.3%	5.1%	14.9%	2.7%	31.0%	4.7%	12.3%
San Mateo	132,295	3.4%	13.7%	7.6%	2.7%	31.7%	3.1%	37.8%
Sacramento	107,568	16.1%	8.6%	18.5%	3.6%	18.6%	2.8%	31.9%
Fresno	44,927	5.0%	5.0%	21.7%	4.4%	13.9%	2.3%	47.8%
El Dorado	5,821	6.2%	7.6%	16.0%	5.1%	15.7%	4.7%	44.7%
Butte	5,292	4.0%	4.0%	8.7%	2.7%	13.7%	2.4%	64.4%

A notable finding of the BISG analysis is the most diverse counties by proportional share of race and ethnicity for registered voters. Table 3 below lists the counties with the largest share of Black, Latino, and AAPI registered voters, respectively.

Black voters made up their largest proportional share of registered voters in Sacramento at 12.3%. In Fresno, Latinos comprised their largest share of registered voters at 38.1%. AAPI voters made up their most significant share of the registered electorate in San Mateo at 30.0%.

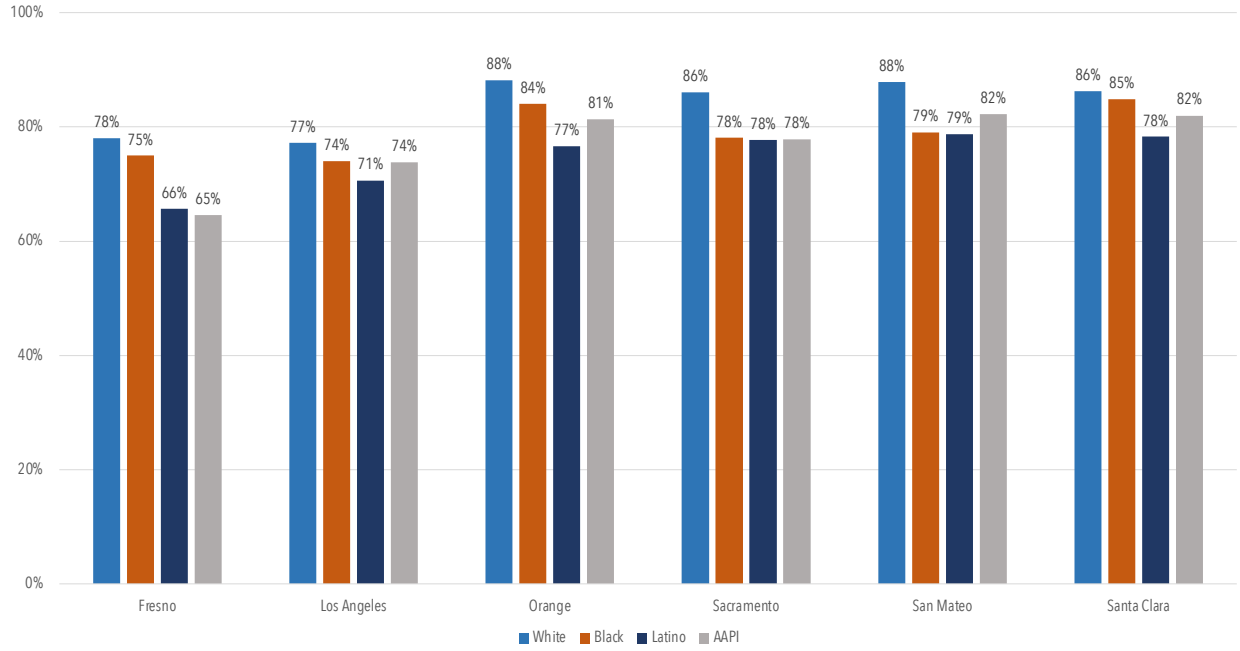
Table 3: Most Diverse VCA Counties by Racial and Ethnic Groups

	Total Registered Voters	White	Black	Latino	AAPI	Other
Sacramento	867,640	57.4%	12.3%	14.4%	12.4%	3.4%
Fresno	506,758	43.2%	7.7%	38.1%	8.9%	2.1%
San Mateo	440,516	46.2%	1.8%	19.2%	30.0%	2.8%

In addition to the composition of registered voters, BISG provides insight into the race and ethnicity of those that voted in the 2020 General Election. Figure 2 below shows the racial and ethnic breakdown for VCA counties with more than 150 thousand registered voters, including Fresno, Los Angeles, Orange, Sacramento, San Mateo, and Santa Clara. White voters had the highest turnout rate across all six of these counties. Los Angeles had the lowest turnout rate for Black voters, while Fresno had the lowest rate for Latino and APPI voters. The most significant disparity

among groups is in Fresno, where the White-AAPI turnout gap stood at about 13.5 points. As shown in Table 2, Fresno's AAPI electorate is mainly comprised of Indian and Chinese voters.

Figure 2: Voter Turnout in the 2020 General Election by Race and Ethnicity for the Six Largest VCA Counties



V. Aggregated Results Across All VCA Counties

This next section will show how BISG was used to provide aggregated estimates for all VCA counties. Table 5 below shows there were approximately 10.79 million registered voters for the 2020 General Election. White voters make up most of the registered voters in VCA counties, with 5.19 million or 48.1% of the electorate.

he next largest group is Latino voters at 3.08 million or 28.5%, followed by AAPI voters with 1.51 million or 14.0%. Of any single racial/ethnic group, Black voters make up the smallest share of the registered electorate in VCA counties with approximately 749 thousand or 6.9%. The remaining 2.4% of registered voters are individuals from other racial/ethnic groups or multi-racial backgrounds.

Table 5: Registered Voters by Race and Ethnicity in All VCA Counties

	VCA Counties' Total	
	Estimate	% Share
Total Registered Voters	10,790,520	-
White	5,194,399	48.1%

Latino	3,080,257	28.5%
AAPI	1,512,291	14.0%
Black	748,797	6.9%
Other	254,777	2.4%

Focusing on turnout in VCA counties, Table 6 below shows that out of approximately 10.79 million registered voters, about 8.44 million or 78.2% voted in the 2020 General Election. White voters had the highest turnout of any single racial/ethnic group, with a rate of 82.0%. The group with the next highest turnout was AAPI voters with a rate of 77.7%, followed by Black voters with 76.8%. Latino voters had the lowest turnout by a significant margin, with a rate of 72.2%.

It is important to note that the turnout rates provided are based on those already registered to vote – who can be considered relatively high-propensity voters. In other words, mobilization efforts may successfully register Latino voters, but the drop off to those that *actually* vote is considerable.

Table 6: Turnout by Race and Ethnicity in All VCA Counties

	VCA Counties' Total		
	Registered	Voted	Turnout Rate
Total	10,790,520	8,435,056	78.2%
White	5,194,399	4,259,573	82.0%
Latino	3,080,257	2,223,134	72.2%
AAPI	1,512,291	1,174,719	77.7%
Black	748,797	575,241	76.8%
Other	254,777	202,389	79.4%

Table 7 below details the voting methods utilized by race and ethnicity across all VCA counties. The preferred voting method for all groups was undoubtedly voting-by-mail, with a utilization rate of 83.6%. The use of voting-by-mail as the most preferred method of voting is likely due to the sending of mail ballots to voters during the COVID-19 pandemic and the increased public health concern of public spaces (such as vote centers) causing spread of the virus.

The next most utilized method was in-person voting which about 1.25 million or 14.8% of voters chose to cast a ballot. The remaining 139 thousand or 1.7% of votes were cast using various forms of conditional voter registration, or 'same-day registration.' Both White and Black voters cast ballots at similar rates across methods comparable to the VCA counties' average.

An additional 5% of AAPI voters, however, selected to vote-by-mail over in-person compared to the average. Conversely, an additional 3% of Latino voters chose to vote in-person instead of voting-by-mail compared to the VCA counties' average.

Table 7: Share of Ballots Cast for Voting Methods by Race and Ethnicity in All VCA Counties

	VCA Counties' Total						
	Voted	In-Person		By-Mail		CVR/Non-CVR	
Total	8,435,056	1,245,230	14.8%	7,050,334	83.6%	139,493	1.7%
White	4,259,573	618,941	14.5%	3,583,860	84.1%	56,772	1.3%
Latino	2,223,134	397,341	17.9%	1,775,129	79.8%	50,664	2.3%
AAPI	1,174,719	115,598	9.8%	1,039,690	88.5%	19,431	1.7%
Black	575,241	85,650	14.9%	480,111	83.5%	9,480	1.6%
Other	202,389	27,707	13.7%	171,542	84.8%	3,140	1.6%

Table 8 below provides insight into the preferred voting methods by age group. About 89% of voters had a date of birth listed on the voter file. These voters were split into four age groups – 18 to 29, 30 to 49, 50 to 64, and 65 and over.

Casting a ballot by-mail was widely preferred regardless of age group. 18 to 29-year-old voters most utilized CVR or 'same-day registration' with about 48 thousand or 3.7% casting a ballot with this method. This possibly suggests that younger voters missed the conventional deadline to register to vote but still cast an in-person ballot with their registration verification process completed later. The use of CVR registration by younger voters should be tracked to determine if the use of such methods were due to younger voters during the 2020 election not having access to such public spaces as schools/college or the DMV, where they have traditionally been registered to vote, due to the pandemic or if there are other reasons why younger voters are missing the voter registration deadline.

30 to 49-year-old voters were the largest group to participate in the 2020 General Election. 50 to 64-year-olds voted in person with about 317 thousand or 16.2%, the highest in-person rate. Voters 65 years and older had the highest VBM utilization rate at 89.6%. Given the public health threats posed by the COVID-19 pandemic during the 2020 General Election, older voters may have chosen to cast a mail ballot at higher rates than past elections.

Table 8: Voting Method by Age Group in All VCA Counties

	VCA Counties' Total			
	Voted	In-Person	Vote-by-Mail	CVR / Non-CVR

18 to 29	1,284,010	189,020	14.7%	1,046,995	81.5%	47,995	3.7%
30 to 49	2,407,159	383,104	15.9%	1,980,039	82.3%	44,016	1.8%
50 to 64	1,957,841	316,718	16.2%	1,620,300	82.8%	20,823	1.1%
65 and Over	1,881,146	185,430	9.9%	1,684,716	89.6%	11,000	0.6%

There are potentially significant disparities across racial and ethnic groups that may require additional research. Noteworthy differences include the near 10-point White-Latino turnout gap, the preference to vote in-person for Latino voters, and potential reliance on CVR by younger voters.

VI. Highlighting the Five Largest VCA Counties

This section of the report provides detailed results from the five largest VCA counties: Los Angeles, Orange, Santa Clara, Sacramento, and Fresno Counties. More than 90% of registered voters in all VCA counties lived in one of these counties during the 2020 General Election. In descending order of the number of registered voters, this section will outline registration, turnout, voting method by race and ethnicity.

Los Angeles County

During the 2020 General Election, Los Angeles had 5.63 million registered voters and accounted for more than 52% of VCA counties' registered electorate. Table 9 below details the county's registered voters by race and ethnicity. The majority of the registered electorate in Los Angeles is comprised of White voters at 2.43 million or 43.3% and Latino voters at 2.01 million or 35.8%.

Table 9: Registered Voters by Race and Ethnicity in Los Angeles County

	Los Angeles	
	Estimate	% Share
Total Registered Voters	5,625,109	-
White	2,433,453	43.3%
Latino	2,013,672	35.8%
AAPI	611,930	10.9%
Black	442,360	7.9%
Other	123,693	2.2%

Of the approximate 5.63 million registered, 4.17 million or 74.2%, turned out for the 2020 General Election. Shown in Table 10 below, White voters had the highest turnout rate among any group

with about 1.88 million or 77.2% voting. Latino, AAPI, and Black voters had a lower turnout rate than the countywide average.

Table 10: Turnout by Race and Ethnicity in Los Angeles County

	Los Angeles		
	Registered	Voted	Turnout
Total	5,625,109	4,172,421	74.2%
White	2,433,453	1,878,126	77.2%
Latino	2,013,672	1,422,191	70.6%
AAPI	611,930	451,570	73.8%
Black	442,360	327,554	74.0%
Other	123,693	92,980	75.2%

Focusing on voting methods for those who participated in the 2020 General Election, Table 11 below provides a breakdown by race and ethnicity. As mentioned earlier, Los Angeles had the largest share of ballots cast in-person of any VCA county at 19.2%. While White and Black voters cast their ballots at similar rates across methods, Latino voters slightly preferred to vote in-person.

Table 11: Method of Voting in the 2020 General Election for Los Angeles County

	Los Angeles						
	Voted	In-Person		By-Mail		CVR/Non-CVR	
Total	4,172,438	802,690	19.2%	3,297,418	79.0%	72,330	1.7%
White	1,878,126	360,174	19.2%	1,489,326	79.3%	28,626	1.5%
Latino	1,422,196	301,145	21.2%	1,091,617	76.8%	29,434	2.1%
AAPI	451,573	60,393	13.4%	383,734	85.0%	7,446	1.6%
Black	327,559	63,926	19.5%	258,380	78.9%	5,253	1.6%
Other	92,975	17,050	18.3%	74,354	80.0%	1,571	1.7%

Considering the size and diversity of the electorate in Los Angeles, several of the disparities shown in the tables above are worth noting. Latino voters had the lowest turnout rate at 70.6%, and this is the second-lowest Latino turnout rate among VCA counties. Further, the White-Latino turnout gap was more than 6 points for the election. Further research is required to understand the deficiencies in Latino voter mobilization in Los Angeles.

Orange County

Among all VCA counties, Orange County has the second most registered voters with approximately 1.81 million. Table 12 below shows that about 55% or 999 thousand registered voters are White. Most of the remaining registered voters are Latino or AAPI, with shares of 21.4% and 18.6%, respectively. Less than 100 thousand registered voters are of a different race/ethnicity than White, Latino, or AAPI.

Table 12: Registered Voters by Race and Ethnicity in Orange Count

	Orange	
	Estimate	% Share
Total Registered Voters	1,808,539	-
White	999,150	55.2%
Latino	387,926	21.4%
AAPI	335,927	18.6%
Black	46,104	2.5%
Other	39,432	2.2%

Orange County had the eighth highest turnout rate among all VCA counties but was only 1.7 points lower than the highest. Table 13 below provides turnout by race and ethnicity. Similar to the VCA counties' aggregated results, White turnout at 88.2% was higher than the countywide average of 84.2%. Latino and AAPI voters, which comprise 40% of the voters in Orange, however, had turnout rates lower than the countywide average at 76.6% and 81.3%, respectively.

Table 13: Turnout by Race and Ethnicity in Orange County

	Orange		
	Registered	Voted	Turnout
Total	1,808,539	1,523,664	84.2%
White	999,150	880,820	88.2%
Latino	387,926	297,173	76.6%
AAPI	335,927	273,100	81.3%
Black	46,104	38,761	84.1%
Other	39,432	33,810	85.7%

Table 14 below details the preferred methods of voting by race and ethnicity. White, Latino, and Black voters voted similarly across methods. However, AAPI voters had an approximate 5-point preference for voting-by-mail compared to the countywide average.

Table 14: Method of Voting in the 2020 General Election for Orange County

	Orange						
	Voted	In-Person		By-Mail		CVR/Non-CVR	
Total	1,523,664	255,413	16.8%	1,243,507	81.6%	24,744	1.6%
White	880,820	158,339	18.0%	712,217	80.9%	10,264	1.2%
Latino	297,173	53,595	18.0%	235,863	79.4%	7,715	2.6%
AAPI	273,100	30,921	11.3%	236,569	86.6%	5,610	2.1%
Black	38,761	6,885	17.8%	31,226	80.6%	650	1.7%
Other	33,810	5,674	16.8%	27,631	81.7%	505	1.5%

Like Los Angeles, the White-Latino turnout gap was the most significant among any two groups at 5.6 points. Another noteworthy observation is that Latino voters utilized CVR in-person voting over other groups. The analysis provided earlier in the report explained that CVR is preferred by younger voters suggesting a relatively young Latino electorate in Orange.

Santa Clara County

Santa Clara is the third largest VCA county with 942 thousand registered voters. The county has a majority-minority electorate and has the second-highest proportional share of AAPI voters at 27.5% among the VCA counties. Though White voters still make up the plurality of the registered electorate with 412 thousand or 43.8%.

Table 15: Registered Voters by Race and Ethnicity in Santa Clara County

	Santa Clara	
	Estimate	% Share
Total Registered Voters	942,165	-
White	412,488	43.8%
Latino	186,594	19.8%
AAPI	259,371	27.5%
Black	59,765	6.3%

Other	23,948	2.5%

As shown in Table 16 below, voter turnout across groups remains similar to the countywide average of 83.4%. However, Latino turnout is again the lowest among all groups at 78.3%.

Table 16: Turnout by Race and Ethnicity in Santa Clara County

	Santa Clara		
	Registered	Voted	Turnout
Total	942,165	785,353	83.4%
White	412,488	355,706	86.2%
Latino	186,594	146,106	78.3%
AAPI	259,371	212,654	82.0%
Black	59,765	50,731	84.9%
Other	23,948	20,156	84.2%

Table 17 details the methods of participation across racial/ethnic groups. There is mostly parity among the ballots cast for the groups. However, Black voters show a slight preference for in-person voting with a utilization rate of 7.1%.

Table 17: Method of Voting in the 2020 General Election for Santa Clara County

	Santa Clara						
	Voted	In-person		By-Mail		CVR/Non-CVR	
Total	785,353	44,280	5.6%	732,976	93.3%	8,097	1.0%
White	355,706	19,295	5.4%	333,819	93.8%	2,592	0.7%
Latino	50,731	2,926	5.8%	47,386	93.4%	419	0.8%
AAPI	212,654	10,657	5.0%	199,413	93.8%	2,584	1.2%
Black	146,106	10,336	7.1%	133,449	91.3%	2,321	1.6%
Other	20,156	1,067	5.3%	18,909	93.8%	180	0.9%

Like the other counties analyzed, Santa Clara has a distressingly low turnout rate for Latino voters. Further, the White-Latino turnout gap is nearly 8-points. The data does not show a difference in voting method preference among voters, which could indicate deficiencies in mobilizing Latino voters.

Sacramento County

Displayed in Table 18, Sacramento has approximately 868 thousand registered voters, with 498 thousand or 57.4% being White. The county shows relatively uniform diversity among non-White voters, with Latinos at 14.4% and AAPI and Black voters at 12.4% and 12.3%, respectively.

Table 18: Registered Voters by Race and Ethnicity in Sacramento County

	Sacramento	
	Estimate	% Share
Total Registered Voters	867,640	-
White	498,380	57.4%
Latino	125,249	14.4%
AAPI	107,568	12.4%
Black	106,684	12.3%
Other	29,759	3.4%

Like all VCA counties, White voters had the highest turnout rate at 86.1%. Conversely, Latino, AAPI, and Black voters had turnout rates lower than the countywide average.

Table 19: Turnout by Race and Ethnicity in Sacramento County

	Santa Clara		
	Registered	Voted	Turnout
Total	867,640	718,056	82.8%
White	498,380	429,110	86.1%
Latino	125,249	97,348	77.7%
AAPI	107,568	83,701	77.8%
Black	106,684	83,350	78.1%
Other	29,759	24,547	82.5%

Table 20 reveals that White, Latino, and Black voters all cast their ballots at similar rates across methods and mostly preferred voting-by-mail. AAPI voters were comparable to the other groups but slightly preferred casting a mail ballot like observed in other counties.

Table 20: Method of Voting in the 2020 General Election for Sacramento County

	Sacramento						
	Voted	In-person		By-Mail		CVR/Non-CVR	
Total	718,058	45,420	6.3%	661,152	92.1%	11,486	1.6%
White	429,110	27,563	6.4%	395,972	92.3%	5,575	1.3%
Latino	97,348	6,714	6.9%	88,335	90.7%	2,299	2.4%
AAPI	83,701	3,912	4.7%	78,246	93.5%	1,543	1.8%
Black	83,350	5,690	6.8%	75,991	91.2%	1,669	2.0%
Other	24,547	1,541	6.3%	22,607	92.1%	399	1.6%

As discussed above, Sacramento has the largest share of Black voters among VCA counties. While turnout rates were similar among non-White voters, the turnout gap compared to White voters remains about 8 points for all the groups. Further, Latino voters again had the lowest turnout rate, though by a smaller margin than the other counties observed.

Fresno County

Fresno is the fifth largest VCA county and is the last one with more than 500 thousand voters. As detailed in Table 21, White and Latino voters make up most of the electorate at 43.2% and 38.1%, respectively. The county has the largest share of Latino voters of any VCA county.

Table 21: Registered Voters by Race and Ethnicity in Fresno County

	Fresno	
	Estimate	% Share
Total Registered Voters	506,758	-
White	219,101	43.2%
Latino	193,306	38.1%
AAPI	44,928	8.9%
Black	38,918	7.7%
Other	10,506	2.1%

Table 22 below shows that while Fresno has the largest share of Latino voters, the county also has the lowest Latino turnout rate of any VCA county at 65.6%. Fresno has the lowest overall turnout rate at 71.8% and is the only county where Latino and AAPI turnout is under 70%.

Table 22: Turnout by Race and Ethnicity in Fresno County

	Fresno		
	Registered	Voted	Turnout
Total	506,758	363,838	71.8%
White	219,101	170,945	78.0%
Latino	193,306	126,875	65.6%
AAPI	44,928	29,008	64.6%
Black	38,918	29,196	75.0%
Other	10,506	7,814	74.4%

As detailed in Table 23, White and Black voters had similar voting rates across methods. While Latinos are comparable, 4.6% of Latino voters utilized CVR in-person voting – the highest rate of any group in any county.

Table 23: Method of Voting in the 2020 General Election for Fresno County

	Fresno						
	Voted	In-person		By-Mail		CVR/Non-CVR	
Total	363,838	38,077	10.5%	313,984	86.3%	11,777	3.2%
White	170,945	17,730	10.4%	149,135	87.2%	4,080	2.4%
Latino	126,875	14,370	11.3%	106,717	84.1%	5,788	4.6%
AAPI	29,008	2,084	7.2%	26,037	89.8%	887	3.1%
Black	29,196	3,112	10.7%	25,279	86.6%	805	2.8%
Other	7,814	781	10.0%	6,816	87.2%	217	2.8%

Further research must be conducted to evaluate the general mobilization efforts in Fresno to understand why the county has the lowest turnout rates among VCA counties. Likewise, an emphasis needs to be placed on identifying why the county with the largest share of Latino voters has the lowest Latino turnout rate.

VII. Conclusion

The BISG analysis of the 2020 General Election produced novel findings and aroused inquiries that require further research. As discussed above, as of the 2020 General Election, VCA counties are more non-White in their registered electorates.

While White voters remained the plurality, Latino and AAPI voters grew throughout VCA counties, with Latinos as the second-largest electorate on average. Unfortunately, a consistent theme in this report was the gap between White-Latino turnout, which stood at approximately 10-points across all VCA counties.

While the White-Latino turnout gap is the most significant between any two groups, White-Black and White-AAPI turnout gaps were 5.2 and 4.3 points. Black and AAPI voters, however, turned out at similar rates as the VCA counties' average. Additional research is being conducted to include Native-American voters in the BISG analysis. Current U.S. Census Bureau estimates suggest that Native Americans make up less than one percent of all eligible voters in California.

Voting methods varied across groups and counties, with voting-by-mail as the consistent preference. Latino voters displayed a general preference to vote in-person and utilized same-day voter registration (CVR) more than other groups. These observations indicate a need to investigate non-White voter mobilization around age and language across VCA counties to enhance voting equity in several of California's most diverse counties.