California Voter's Choice Act
November 6, 2018 General Election Report

About CEIR

The Center for Election Innovation and Research (CEIR) is a nonpartisan, nonprofit organization working to improve election administration through research, data, and technology. CEIR works with experts and election officials in every state and across the political spectrum to rebuild voter confidence in our elections and democracy, ensure all eligible voters can vote conveniently in a system with maximum integrity, and ultimately increase voter participation.

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Table of Contents

Executive Summary

Signed into law in 2016, the California Voter's Choice Act (VCA) is a new elections model that was introduced in five counties during the 2018 elections. This major election reform allows counties to conduct elections under a new model that expands early voting and ballot return methods. Designed to provide greater flexibility and convenience for voters, this new election model allows voters to choose how, when, and where to cast their ballot. Under the VCA, each voter is mailed a ballot which they can then return by mail to a secure drop box or vote center. Voters are also allowed to cast a ballot at any vote center within their county, or through other expanded in-person early voting options.

This report, commissioned by the California Secretary of State's office pursuant to California Elections Code section 4005(g)(1)(A), provides a snapshot of the implementation of the VCA during the November 2018 General Election for the State Legislature. Focusing heavily on California's data in VoteCal, the statewide voter registration database, this report analyzes the five counties that chose to implement the VCA in 2018—Madera, Napa, Nevada, Sacramento, and San Mateo. While this report presents initial findings and provides context to understand this new model, the long-term effects of the VCA will only become apparent after several election cycles.

How voters cast their ballots differed somewhat between the first two VCA elections. Though both the June primary and November general were marked by an increase in the use of vote-by-mail (VBM) ballots, there was a notable shift in the way voters chose to return those ballots. During the June primary, the most popular voting method was vote by mail, accounting for over half of all ballots cast. That did not hold true for the general election, where 48 percent of ballots cast were returned to a drop off location, and 43 percent of ballots were returned by mail. Ultimately, more than 880,000 ballots were returned by mail or dropped off at a drop off location in the November general, and 97.18 percent of those ballots were cast and counted.

The November election also marked the first general election where Californians could take advantage of same-day voter registration, which is referred to as conditional voter registration (CVR) in state law. In the five VCA counties, every vote center was required to offer CVR. Counties that implemented the VCA led the way in CVR usage statewide. The VCA counties outperformed non-VCA counties in the number of voters using CVR. While the VCA counties accounted for just 6.96 percent of California's registered voter population in 2018, they accounted for 33.86 percent of the state's conditional voter registration usage.

With the passage of the VCA there were concerns that voters might be confused by the changes and turnout negatively affected. The VCA's long-term impact on voter turnout will need to be studied over more election cycles; however, there was no observable negative impact on turnout in 2018.

Across the VCA counties and throughout the state, voter turnout increased compared to the 2010 general election (the most comparable general election in recent history). On average, the five VCA counties also beat statewide turnout by 3.64 percentage points.

While any lasting change in voter registration and turnout will only be evident after several election cycles, in 2018, the VCA expanded accessibility to the ballot and yielded more voting options and opportunities for Californians to register and vote. Voters in VCA counties have more ways to vote, more time to vote, and more locations where they can vote.

Introduction

The Voter's Choice Act (VCA), California's newest election model, was introduced in five counties during the 2018 primary and general elections. Similar to the 2010 elections, the November 2018 General Election included a prominent gubernatorial race and was the first major election after a new president took office, leading to a heightened level of political engagement. That trend is reflected in this report, which shows increases in voter turnout across California, including the VCA counties.

The VCA was passed in 2016 in order to modernize elections in California by allowing counties to conduct elections under a new model that provides greater flexibility and convenience for voters. The new election model allows voters to choose how, when, and where to cast their ballot. Under the VCA, each voter is mailed a ballot, which they can then return by mail, to a secure drop box, or to a vote center. Voters are also allowed to cast a ballot at any vote center within their county, or through other expanded in-person early voting options. Vote centers provide accessible voting machines, bilingual assistance, translated materials, and conditional voter registration, which allows an eligible voter to register and vote through the end of Election Day. Voters in the VCA counties had more convenient voting options than ever before.

In 2018, fourteen counties were permitted to conduct elections under the new VCA model. Five counties chose to do so: Madera, Napa, Nevada, Sacramento, and San Mateo.

The VCA built upon the growing popularity of vote by mail in California. Absentee voting began in the state in 1863,[1] was re-implemented in 1923,[2] and no-excuse absentee ballots have been used since the 1980s.[3] Then in 2001, California gave all registered voters the ability to apply for permanent absentee voter status.[4] Over time the term "absentee" was dropped in favor of "vote-by-mail," signifying that the option was open to anyone, not just those who would be absent on Election Day.

Permanent vote-by-mail ("PVBM") status is very popular among registered voters in California. When PVBM statistics were first recorded in 1992, less than one percent of registered voters were PVBM voters.[5] By the 2002 midterm primaries—the first election after PVBM restrictions were removed—the number of registered PVBM voters had more than tripled to 3.9 percent. By the general election later that year, 8.1 percent of all registered Californians were PVBM voters. Fast-forward to the 2016 general election—the last election before the VCA was enacted—and over 50 percent of California voters were PVBM voters. The VCA counties' PVBM rates were generally higher, ranging from 48 percent to nearly 72 percent of registered voters in the 2016 general election.

By design, the VCA provides administrators with a more direct way of implementing a vote by mail election. Like the majority of California voters prior to the passing of the VCA, voters in VCA counties receive a ballot in the mail which they can then fill out and return on their own time. However, even this initial step is easier in VCA counties as compared to others because registered VCA county voters do not need to opt-in or apply to receive a vote-by-mail ballot.

This report focuses heavily on California's official voter registration and voter activity data in order to provide a snapshot of the November 2018 General Election in the counties that chose to adopt the VCA. During the creation of this report, a number of data challenges arose, limiting the scope of certain analyses and the ability to draw conclusions

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[1] Absentee voting began in California's 1863 gubernatorial election and was later overturned in Bourland v. Hildreth, 26 Cal. 161 (1864).

[2] Statutes of California, Ch. 283, 586-92 (1923). https://clerk.assembly.ca.gov/sites/clerk.assembly.ca.gov/files/archive/Statutes/1923/23Vol1_Chapters.pdf.

[3] "Voting by mail and absentee voting," MIT Election Data and Science Lab, https://electionlab.mit.edu/research/voting-mail-and-absentee-voting. Nicole Winger, "California's General Election: Frequently Asked Questions," California Secretary of State, November 3, 2014. https://www.sos.ca.gov/administration/news-releases-and-advisories/2014-news-releases-and-advisories/db14-090/.

[4] Nicole Winger, "California's General Election: Frequently Asked Questions," California Secretary of State, November 3, 2014. https://www.sos.ca.gov/administration/news-releases-and-advisories/2014-news-releases-and-advisories/db14-090/.

[5] "Vote by Mail," California Secretary of State, Last Accessed November 27, 2018, https://elections.cdn.sos.ca.gov/vote-by-mail/pvbm-voter-survey.xls

about key demographic categories, such as ethnicity. These challenges are discussed broadly before the data analysis portion of the report. Then, when presenting the data, specific challenges are carefully noted alongside this report's analyses. The data is presented by first examining voter registration, then turnout and how voters cast their ballots, and finally, more specific issues like ballot rejection. Next, there is a brief discussion of the data, highlighting key information and comparing the results of the November 2018 General Election to those of the June 2018 Primary Election.

Data Requirements, Sources, & Limitations

The Voter's Choice Act (VCA) required an analysis of election and demographic information (listed below).[6] Election information was broken down by demographic factors where possible.

Election Information	Demographic Information
Voter turnout	Race
Voter registration	Ethnicity
Ballot rejection	Language preference
Provisional ballot use	Age
Accessible vote-by-mail ballot use	Gender
Number of votes cast at each vote center	Disability
Number of ballots returned at ballot drop-off locations	Permanent vote-by-mail status
Number of ballots returned by mail	Historical polling place voters
Number of persons who registered to vote at a vote center	Political party affiliation
Instances of voter fraud	Language minorities
Any other problems that became known to election officials	

Data Sources

This report primarily relies on data from VoteCal, California's single, uniform, centralized voter registration database. CEIR gathered additional data by submitting requests to county registrars of voters in the five VCA counties. Occasionally, publicly available data is also referenced.

VoteCal

A number of tables were sent to us from the California Secretary of State's VoteCal voter registration database. The data in those tables covers a range of information about elections, but is focused primarily on basic registration information and characteristics of ballots cast. This report draws data from four tables: voter information, vote-by-mail ballot use, provisional ballot use, and voter participation history.

Voter Information. This table contains basic demographic information and registration information such as how and when a voter registered. For this report, the voter

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[6] The source of each election and demographic factor is included in Appendix A.

registration table was recreated to approximate voter registration information as it existed on Election Day, November 6, 2018.[7]

Vote-by-Mail Ballot Use. This table contains information regarding how voters received vote-by-mail (VBM) ballots, whether a voter returned a VBM ballot, and other information regarding the administration of vote by mail.

Provisional Ballot Use. This table includes information about both traditional provisional ballots and conditional voter registration (CVR) ballots, a subset of provisional ballots reserved for those who register conditionally. This data indicates when provisional ballots were issued, whether each ballot was counted, and, for uncounted ballots, the reason a ballot was rejected.

Voter Participation History. This table is a snapshot of voter activity at the time of an election, providing basic combinatorial information about voting in a particular election. If perfectly maintained, this table would be expected to match up exactly with certain fields in the VBM table and the provisional table; however, that was not always the case in practice.[8]

Counties

When data was unavailable through VoteCal, CEIR submitted requests directly to county election officials in the VCA counties. These requests covered various data points ranging from the issuance of accessible ballots to the specific number of ballots dropped off at each vote center. County officials were also asked to provide any other information that they thought might be relevant to understanding the impact of the VCA.

Officials from each of the five VCA counties responded to CEIR's requests, providing helpful information, though with variations in data quality. Despite a lack of data on the number of daily ballots received for the 2018 primary election, most counties provided these totals for the 2018 general election, and that data is included in this report.

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[7] The voter list used to recreate the Election Day voter list was retrieved in January 2019. Waiting until after the general election results were certified to recreate the Election Day voter list increased the likelihood that voters who registered conditionally or updated their registration prior to the election would be properly reflected in this report's data. However, not all voters' information was updated. For example, many registered voters who were listed as inactive in January 2019 voted in the general election. To correct for this, any inactive voters who voted in the general election were considered "active" in this report.

[8] For example, in the VCA counties there were 545,664 VBM voters in the voter participation history table and 545,770 VBM voters in the vote-by-mail ballot use table. This variation is likely due to an update of the voter registration list for the election, effectively overwriting the database's previous state.

Political Data Inc.

In order to supplement the limited ethnicity data available in VoteCal, CEIR received additional data for the VCA counties from Political Data Inc. (PDI), a data and software company in California. PDI's data was received on March 5, 2019.[9] CEIR was unable to verify the accuracy of PDI's data, which is included in this report as-is. Additionally, PDI uses certain categories of ethnicity that are not included in VoteCal (e.g., "Italian") and omits some categories that are included in VoteCal (e.g., "black, not of Hispanic origin"), which makes directly comparing the two datasets difficult. Similarly, PDI's data regarding the method of voting by ethnicity is omitted because only "voted absentee" and "voted at polls" are included, covering a more limited range of voting behavior than the VoteCal data.[10]

Data Challenges

As indicated above, there were some limitations with the data used in this report. One such limitation is in the maintenance of the voter information table. The voter information table always reflects the most current data available, and there are no snapshots to preserve the exact makeup of the voter list at a particular date and time.[11]

Also, because the current voter registration database is still relatively new, it can be difficult to reliably recreate voter lists from any election prior to 2016. Thus, though we received voter participation history for prior elections, we did not receive a voter registration list for them. This greatly limited the ability to measure voter demographics or turnout in past years. Fortunately, although certain analyses were still limited, sometimes publicly available data was available and used instead.

Beyond these issues, there are other limitations with the data. Information such as voter ethnicity and gender are requested on the voter registration form but not required, leading to a higher likelihood of response bias, especially considering that most California voters have chosen to leave those optional fields blank.[12]

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[9] Like VoteCal, PDI's voter list is a live database. The data received for this report was up to date as of March 5, 2019.

[10] Self-reported ethnicity data from VoteCal is used as the primary source of ethnicity data in this report. Supplemental ethnicity data from PDI can be found in Appendix E.

[11] For example, if a researcher wanted to know on November 10, 2018, how many people were registered to vote on November 5, 2018, the up-to-date voter information table would be used to recreate a November 5th voter list. Anyone who registered to vote or changed their registration between November 5 and November 10 would need to be removed or reverted to their prior status.

[12] To correct for potentially anomalous voter registration database data, this report relied on certain assumptions, such as excluding from any age-based analysis individuals with a birthdate before the year 1900. Other assumptions are included where relevant in this report's data section.

Ethnicity Data Challenges

Obtaining high-quality ethnicity data is particularly challenging. Common methods of gathering ethnicity data often require a tradeoff between completeness and validity. In the context of this report, the two datasets available—from VoteCal and PDI—had distinct issues. In VoteCal, fewer than one out of four voters self-reported their ethnicity on their voter registration. This led to an incomplete VoteCal ethnicity dataset, where those records with data were of high quality (as they were self-identified) but possibly made up an unrepresentative sample of the total electorate. Alternatively, PDI's ethnicity dataset, which was created based on a combination of surname analysis and other factors, purported to represent the entire electorate. But, since ethnicity was imputed by other factors (rather than being self-reported), the quality of each individual response could not be verified, and the totals were likely affected by error.

Since both the VoteCal and PDI datasets may not be completely representative datasets, each was tested against the latest U.S. Census American Community Survey (ACS) 5-year estimate of the Citizen Voting Age Population (CVAP) by race and ethnicity.[13] The Census ACS data is widely considered to be the most accurate measure of CVAP, as it is both self-reported and methodologically representative as a whole. The following table shows the proportion of each ethnic group[14] relative to the total population for each data source (CVAP, VoteCal, and PDI) across the VCA counties.[15]

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[13] U.S. Census Bureau; American Community Survey, 2019 American Community Survey 5-Year Estimates, 2013-2017, Citizen Voting Age Population by Race and Ethnicity, http://www2.census.gov/programs-surveys/decennial/rdo/datasets/2017/2017-cvap/CVAP_2013-2017_ACS_csv_files.zip. It is important to note that the ACS 5-year estimate of CVAP by race and ethnicity is likely to *underestimate* the proportion of any racial or ethnic group that is growing in size.

[14] Each data source used different racial/ethnic categories. In order to compare the three sources, certain categories were merged. See Appendix A for a breakdown of categories by data source.

[15] The total for each source was slightly different, and all were limited to data from the five VCA counties. For CVAP data, the total was the estimated citizen voting age population (1,771,830). For VoteCal data, the total was the number of registered voters who self-reported their ethnicity (327,824) based on general election data received in late January 2019. Finally, for PDI data, the total was the total number of registered voters (1,356,131), according to PDI's general election data received in early March 2019. The total number of registered voters was used for PDI's total because PDI includes ethnicity data for all registered voters. For a more in-depth data, including at the county level, see Appendix E.

Comparing the Representativenes of Ethnicity Datasets (VCA Counties)			
	CVAP (% of Total)	VoteCal (% of Total*)	PDI (% of Total)
American Indian or Alaska Native	0.44%	0.50%	0.00%
Asian or Pacific Islander	16.89%	17.88%	11.88%
Black or African American	7.17%	4.95%	2.14%
White (PDI bottom % includes "generic")	54.34%	52.90%	26.19% (68.01%)
Multiracial	3.12%	4.80%	1.05%
Latino (Hispanic/Spanish)	18.04%	16.13%	15.23%

* VoteCal's total only includes voters who self-identified their ethnicity. See **footnote 15** for more information.

Presentation of Data

Within VoteCal, certain data contained a long list of categories.[16] To keep this report's presentation of data clear and concise, categories that made up less than 1 percent of the sample were aggregated and reported as "Other." This method applies to language preferences and political parties as well, two sections that did not have an "Other" variable reported by VoteCal.

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[16] For instance, language preference includes the possibility of English, Spanish, Chinese, Vietnamese, Filipino, Korean, Hindi, Khmer, Japanese, or Thai.

The 2018 General Election

In this section, data from a variety of sources is synthesized to provide a clearer picture of the November 2018 General Election in the VCA counties. The primary source of data was VoteCal. However, data submitted by county election officials, data from PDI, and publicly available data were used to supplement VoteCal's data for certain analyses. Topics include voter registration, voter turnout, methods of voting, VBM ballot methods of return, use of provisional and CVR ballots, and ballot rejection. Where possible, these topics are broken down by demographic categories such as age, ethnicity, language preference, political party, and permanent VBM status.

Voter Registration

The demographic makeup of the VCA counties provides important context to understanding the effectiveness of the new election model. This section breaks down the composition of active registered voters in the VCA counties and compares that to voters statewide. A registered voter was considered active if (a) the voter was identified as an active voter in VoteCal, or (b) the voter was identified as an inactive voter in VoteCal, but the voter cast a ballot in the November 2018 General Election. Four key demographics are explored among active registered voters: age, ethnicity, language preference, and party affiliation.

There were 1,380,981 active registered voters in the VCA counties for the November 6, 2018 General Election.[17] The VCA counties constituted 6.96 percent of the state's active registered voters. Statewide, voter registration went from 19,021,690 in the primary election to 19,837,235 for the general election—a 4.29 percent increase. In the VCA counties, the number of registered voters increased by 51,095, or 3.82 percent, following the June primary election. Registration increases in the VCA counties ranged from a 2.23 percent increase in Nevada county to a 5.64 percent increase in Madera County.

Age of Registered Voters

Almost all registered voters (99.65%) had a valid age[18] associated with their voter record. When compared to all of California, registered voters in the VCA counties tended to be slightly older, with a higher percentage of voters in the 45 to 54, 55 to 64, and 65+ age categories and fewer in the other remaining age groups. For both the VCA counties and all of California, the single largest age group was voters age 65 and older, and the smallest group was voters age 18 to 24.

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[17] Unless noted otherwise, all references to "registered voters" in this report refer to only active registered voters.
[18] A voter is considered to have a "valid age" if that voter's birth year is 1900 or later.

The individual VCA counties followed the same overall trend, although there was some variation. Voters age 65 and older were still the most prevalent, and those from age 18 to 24 were the least. However, while Sacramento and San Mateo Counties were slightly more evenly distributed, Madera, Napa, and Nevada Counties reported much higher rates of registered voters age 65 and older.

Age of Registered Voters (by County)							
	Age						
County	18-24	25-34	35-44	45-54	55-64	65+	Total Valid Ages
Madera	7,082 (12.21%)	8,676 (14.96%)	7,945 (13.70%)	7,939 (13.69%)	10,427 (17.98%)	15,895 (27.41%)	57,964
Napa	7,068 (8.99%)	11,210 (14.26%)	10,810 (13.75%)	12,162 (15.47%)	14,719 (18.72%)	22,646 (28.80%)	78,615
Nevada	4,099 (5.88%)	8,096 (11.61%)	9,165 (13.15%)	9,330 (13.38%)	14,548 (20.87%)	24,467 (35.10%)	69,705
Sacramento	77,011 (9.99%)	139,244 (18.06%)	124,380 (16.13%)	125,640 (16.29%)	136,447 (17.69%)	166,607 (21.60%)	769,329
San Mateo	35,619 (8.83%)	65,595 (16.26%)	64,658 (16.03%)	70,549 (17.49%)	71,922 (17.83%)	92,133 (22.84%)	400,476
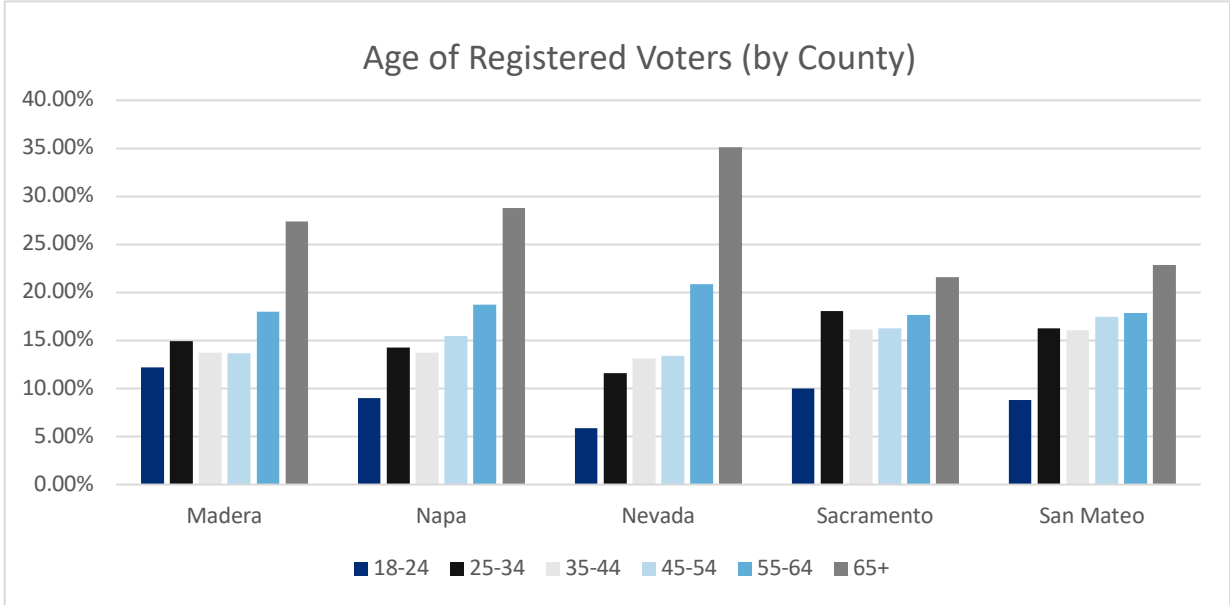
Age was by far the largest change in registration demographics between the 2018 primary and general elections. In the VCA counties, registration among 18- to 24-year-olds increased by 22.54 percent, far outpacing the 3.84 percent increase in total registration among voters with valid ages. However, those aged 18 to 24 were still the smallest age

group among registered voters. Voters age 65 and older were the only age group to see a decrease in registration between the primary and general election.

Ethnicity of Registered Voters

The goal of investigating how the VCA affected voters across ethnic groups is an important one. Obtaining quality ethnicity data is a challenge. Fewer than one out of four voters in the VCA counties reported their ethnicity on their voter registration, meaning there is a high likelihood of self-selection bias, which could result in data that is not representative of the entire registered voter population.[19]

Looking at registered voters' ethnicity by VCA county illustrates that a wide array of voters do not self report ethnicity. Across the five counties, over 75 percent of voters did not report ethnicity. Even San Mateo, the county with the greatest proportion of ethnicity data, only had 30.1% of voters self-report their ethnicity. Such low rates of reporting mean that it is difficult to draw any conclusions about the voting activity of the various ethnic groups in the VCA counties. There is simply not enough data to know whether those who have reported their ethnicity are representative of the entire electorate.

As mentioned, in this data set, ethnicity and race are not separately recorded. Instead, those categories are merged into a single group, which is referred to as "ethnicity." Voters could identify their ethnicity as "White, not of Hispanic Origin," "Asian or Pacific Islander," "Hispanic," "Black, not of Hispanic Origin," "Multi-racial," "American Indian or Alaskan Native," or "Other."

Self-Reported Ethnicity of Registered Voters (by County)									
	Ethnicity (Self-Reported)								
County	No Ethnic Info Available	White, not of Hispanic Origin	Hispanic	Asian or Pacific Islander	Other	Black, not of Hispanic Origin	Multi-racial	Am. Indian or Alaskan Native	Reg. Voters
Madera	47,137 (81.28%)	5,491 (9.47%)	4,267 (7.36%)	278 (0.48%)	138 (0.24%)	197 (0.34%)	390 (0.67%)	93 (0.16%)	57,991
Napa	65,141 (82.84%)	8,412 (10.70%)	2,875 (3.66%)	1,088 (1.38%)	156 (0.20%)	268 (0.34%)	650 (0.83%)	42 (0.05%)	78,632
Nevada	56,576 (81.16%)	11,526 (16.53%)	317 (0.45%)	140 (0.20%)	671 (0.96%)	44 (0.06%)	343 (0.49%)	96 (0.14%)	69,713
Sacramento	602,308 (78.10%)	89,150 (11.56%)	26,003 (3.37%)	23,808 (3.09%)	4,491 (0.58%)	14,639 (1.90%)	9,835 (1.28%)	985 (0.13%)	771,219
San Mateo	281,995 (69.90%)	58,828 (14.58%)	19,422 (4.81%)	33,315 (8.26%)	3,808 (0.94%)	1,091 (0.27%)	4,530 (1.12%)	437 (0.11%)	403,426

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[19] Supplemental ethnicity data from PDI can be found in Appendix E and is provided as-is.

Language Preference of Registered Voters

When registering to vote, Californians are asked if they would like to receive election materials in a specific language. If a voter selects "English" or does not select any language, the voter will receive the standard election materials in English. VCA counties mirrored the patterns of registered voters statewide. In both regions, Spanish was the most frequently requested non-English language followed by Chinese. Statewide, 3.46 percent of registered voters requested election materials in a language other than English when registering to vote. In the VCA counties, only 1.68 percent of registered voters did the same.

The number of registered voters indicating a non-English language preference increased in both the VCA counties and the state overall. In fact, the VCA counties outpaced the state in this respect, with an increase of 12.58 percent as compared to the overall state's 8.38 percent increase. However, it is worth noting that the counties are not required to provide ballot translations for all language preferences. The languages covered by the individual VCA counties are shown below.

Non-English Ballot Translations Required (by County)		
County	**Languages**	
Madera	Spanish Punjabi	
Napa	Spanish Filipino	
Nevada	Spanish	
Sacramento	Chinese Spanish Hmong Korean	Punjabi Filipino Vietnamese
San Mateo	Chinese Hispanic Korean Filipino	

Party Affiliation of Registered Voters

With regard to registered voters' political party affiliation, the VCA counties and non-VCA counties were similar. The Democratic Party has by far the most registered voters in California, followed by the Republican Party and "No Party Preference."[20]

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[20] See Appendix B for the table with this data.

The breakdown of registered voters' party affiliation by VCA county showed slightly different trends, particularly among the smaller counties. Madera County reported having more registered Republicans than Democrats, while Nevada County had a nearly equal number of Democrats and Republicans. San Mateo County, on the other hand, was more Democratic than the state average, with nearly three times as many Democrats as Republicans.

Voter Turnout

While there are many factors that can affect turnout in a given election, this section provides a snapshot of voter turnout in the VCA counties, including how turnout varied across regions and how various demographic groups turned out to vote.[21] Whenever possible, turnout was measured by calculating the proportion of ballots cast compared to the eligible voting population from the Statement of the Vote produced by the California Secretary of State.[22] This method of measuring turnout was considered the most accurate; however, demographic data for the eligible voting population is not as robust as demographic data for the registered voter population. So, for many analyses, turnout instead was measured by looking at the number of registered voters who turned out compared to the entire registered voter population. Because of certain data limitations, this measurement included only voters registered at least two weeks before Election Day.[23]

In the November 2018 General Election, eligible voter turnout was 50.45 percent across all of California. The VCA counties outperformed the state with 54.09 percent turnout.

Turnout of Eligible Voters (by Region)			
Region	Eligible Voters	Ballots Cast	% Turnout
VCA Counties	1,781,734	963,806	54.09%
Statewide	25,200,451	12,712,542	50.45%

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[21] The next section, Voting Methods, provides additional insight into how voters cast their ballots. This section, however, only looks at turnout in the aggregate.

[22] The eligible voting population included all registered voters as well as eligible-but-unregistered individuals. Eligible voting population totals were taken from California's official Statement of Vote which relied on a report of registration as of October 22, 2018. https://elections.cdn.sos.ca.gov/sov/2018-general/sov/2018-complete-sov.pdf.

[23] All tables and analyses in this section clearly indicate whether the eligible voting population or the registered voter population is used.

Turnout of Eligible Voters (by County)					
County	Eligible Voters	Vote Center Ballots Cast	VBM Ballots Cast	Total Ballots Cast	% Turnout
Madera	89,818	4,434	34,534	38,968	43.39%
Napa	92,369	42	57,090	57,132	61.85%
Nevada	78,603	3,059	51,937	54,996	69.97%
Sacramento	1,013,368	30,279	492,373	522,652	51.58%
San Mateo	507,576	34,005	256,053	290,058	57.15%
Total VCA	1,781,734	71,819	891,987	963,806	54.09%

% Turnout of Eligible Voters (by County)
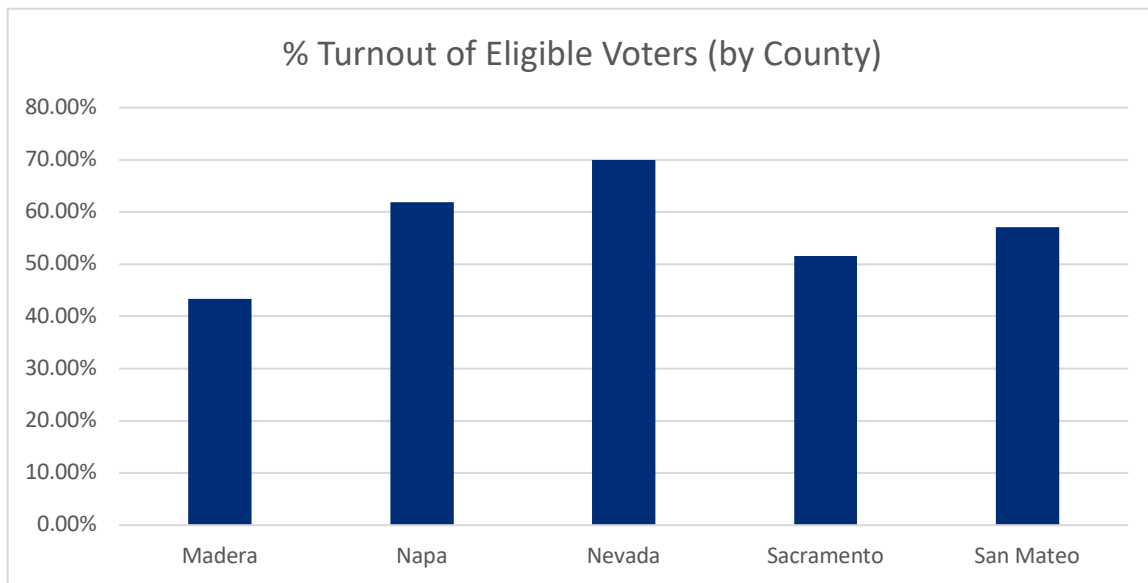
In 2014, the last midterm election year, turnout was lower in all of the VCA counties and across California. In 2010, like 2018, California voters were deciding on a new governor and were two years into a new president's first term. Statewide turnout in 2018 was higher, though, up about 6.71 percentage points compared to 2010. All VCA counties saw an increase in turnout from the 2010 and 2014 general elections, with Madera County seeing the lowest increase among the VCA counties.

Midterm Turnout Over Time			
	2010 % Turnout	2014 % Turnout	2018 % Turnout
Madera	41.27%	31.83%	43.39%
Napa	51.47%	42.35%	61.85%
Nevada	66.95%	51.65%	69.97%
Sacramento	45.52%	34.42%	51.58%
San Mateo	46.29%	33.51%	57.15%
Total VCA	46.80%	35.23%	54.09%
Statewide	43.74%	30.94%	50.45%

Midterm Turnout Over Time

Legend: 2010 % Turnout | 2014 % Turnout | 2018 % Turnout
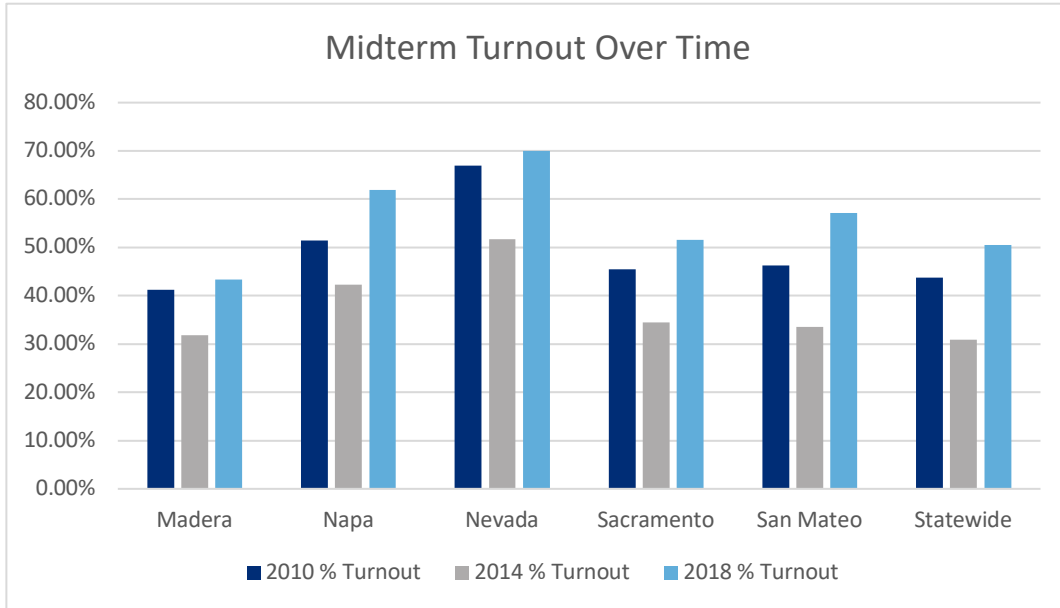
Turnout by Age

Among the VCA counties, registered voters age 65 or older were not only the largest group, but also the group that turned out at the highest rate for the 2018 general election. There was a 33.44 percentage point turnout gap between the youngest voters and the oldest voters.[24] Turnout was closely linked with age. As age increased, so did turnout.

Turnout by Age (VCA Counties)			
Age	Registered Voters	Ballots Cast	% Turnout
18-24	130,879	65,067	49.72%
25-34	232,821	124,453	53.45%
35-44	216,958	138,718	63.94%
45-54	225,620	160,395	71.09%
55-64	248,063	194,627	78.46%
65+	321,748	267,549	83.15%

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[24] This was a narrower gap than in the June 2018 primary election, where the difference in turnout between the groups was 46.64 percent.

Turnout by Age (Statewide)			
Age	**Registered Voters**	**Ballots Cast**	**% Turnout**
18-24	2,169,649	959,809	44.24%
25-34	3,605,487	1,740,744	48.28%
35-44	3,104,699	1,796,531	57.86%
45-54	3,169,634	2,082,923	65.71%
55-64	3,418,553	2,493,220	72.93%
65+	4,344,719	3,355,963	77.24%
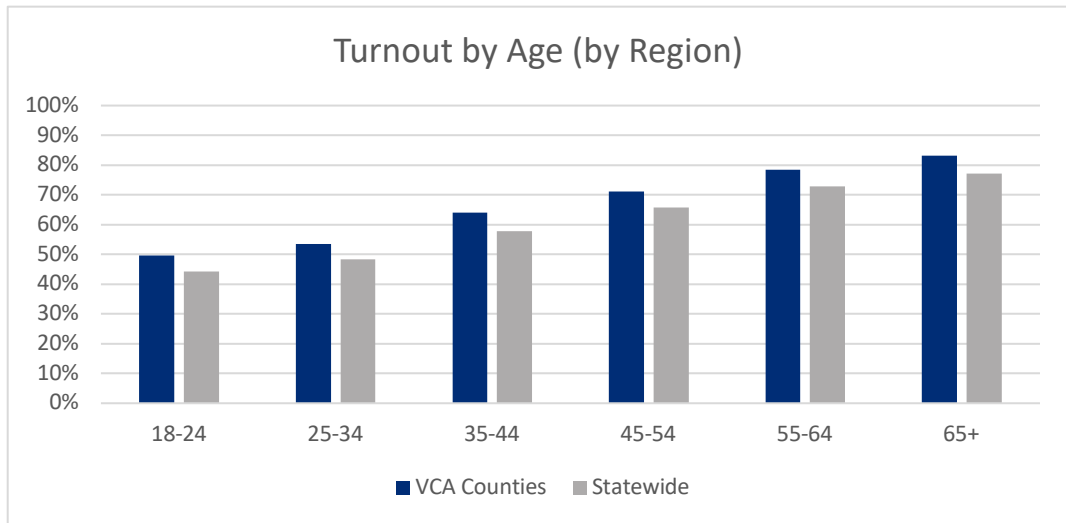
Turnout by Ethnicity

As mentioned previously, while the goal of investigating how the VCA affected voters across ethnic groups is an important one, obtaining high-quality ethnicity data can be challenging. Among VCA voters who reported ethnicity,[25] those who identified as white (non-Hispanic) turned out at the highest rate with 75.33 percent turnout. Turnout was lowest among voters who identified as Hispanic at 61.89 percent. Voters who did not report their ethnicity turned out at 68.85 percent.[26]

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[25] Ethnicity is self-reported and may not be representative; 76.26 percent of VCA voters did not report ethnicity. See the Methodology section starting on page 4 for additional information.
[26] Self-reported ethnicity data from VoteCal is used in this section. Supplemental ethnicity data from PDI can be found in Appendix E and is provided as-is.

Turnout by Self-Reported Ethnicity (VCA Counties)			
Ethnicity (Self-Reported)	Registered Voters	Ballots Cast	% Turnout
No Ethnic Information Available	1,053,157	725,071	68.85%
White, not of Hispanic Origin	173,407	130,636	75.33%
Asian or Pacific Islander	58,629	36,581	62.39%
Hispanic	52,884	32,731	61.89%
Black, not of Hispanic Origin	16,239	10,624	65.42%
Multi-racial	15,748	10,497	66.66%
Other	9,264	6,257	67.54%
American Indian or Alaskan Native	1,653	1,129	68.30%
Total	1,380,981	953,526	69.05%

Turnout by Self-Reported Ethnicity (Statewide)			
Ethnicity (Self-Reported)	Registered Voters	Ballots Cast	% Turnout
No Ethnic Information Available	15,560,821	9,632,030	61.90%
White, not of Hispanic Origin	1,968,992	1,422,955	72.27%
Asian or Pacific Islander	568,959	348,902	61.32%
Hispanic	801,063	479,134	59.81%
Black, not of Hispanic Origin	178,750	113,317	63.39%
Multi-racial	174,262	115,896	66.51%
Other	564,881	317,913	56.28%
American Indian or Alaskan Native	19,507	12,745	65.34%
Total	19,837,235	12,571,185	63.37%

Turnout by Self-Reported Ethnicity (by Region)
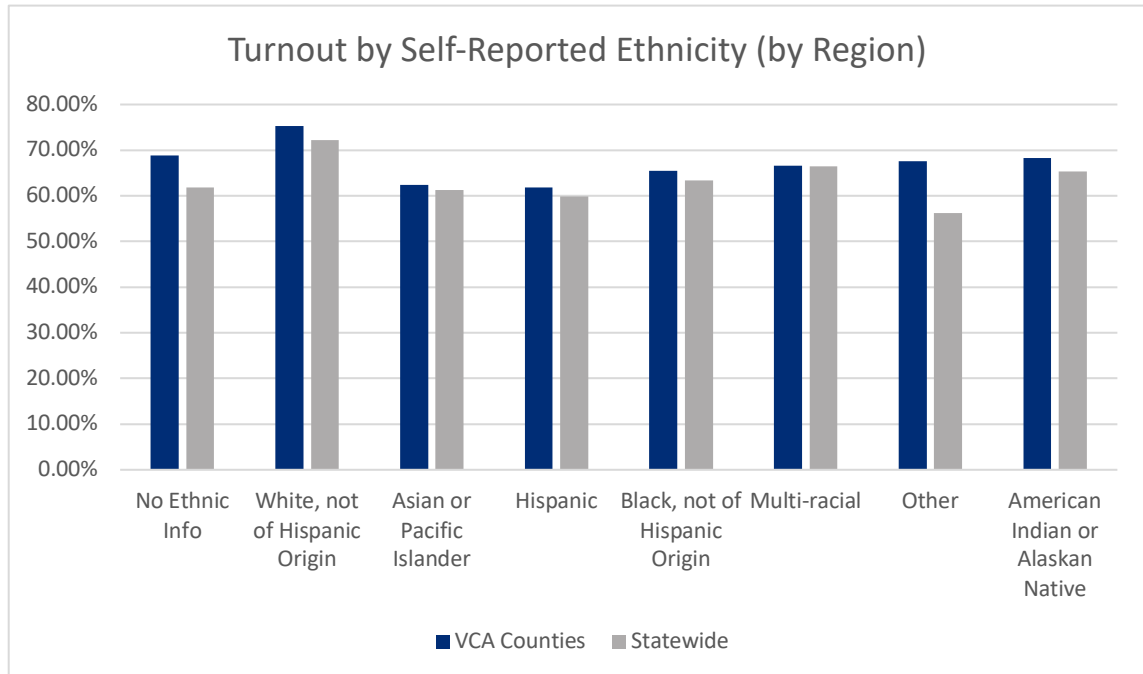
Turnout by Language Preference

Of the voters in the VCA counties who requested election materials in a language other than English, the only groups with more than 1,000 voters were those requesting Chinese materials and those requesting Spanish materials. Between those groups, voters requesting Spanish materials had a higher turnout rate at 61.09 percent (a 24.42 percentage point increase compared to the June primary election). This is a stark difference from the primary election, where those requesting Chinese materials had the highest turnout among non-English ballot requesters.

Turnout by Non-English Language Preference (VCA Counties)			
Language	Registered Voters	Ballots Cast	% Turnout
Spanish	14,838	9,065	61.09%
Chinese	5,231	2,930	56.01%
Vietnamese	1,239	687	55.45%
Filipino	622	362	58.20%
Korean	482	245	50.83%
Hindi	369	204	55.28%
Other	402	232	57.71%

Turnout by Non-English Language Preference (Statewide)			
Language	Registered Voters	Ballots Cast	% Turnout
Spanish	430,336	237,556	55.20%
Chinese	107,727	58,065	53.90%
Vietnamese	78,237	48,755	62.32%
Filipino	15,989	8,245	51.57%
Korean	42,765	21,533	50.35%
Hindi	2,352	1,148	48.81%
Other	8,597	4,171	48.52%

Turnout by Political Affiliation

Turnout by Political Party (VCA Counties)			
Party	Registered Voters	Ballots Cast	% Turnout
Democratic	608,745	446,712	73.38%
No Party Preference	370,581	217,150	58.60%
Republican	321,453	239,598	74.54%
American Independent	38,215	24,613	64.41%
Other	41,987	25,453	60.62%

Turnout by Political Party (Statewide)			
Party	**Registered Voters**	**Ballots Cast**	**% Turnout**
Democratic	8,604,917	5,721,963	66.50%
No Party Preference	5,482,256	2,838,520	51.78%
Republican	4,754,722	3,330,345	70.04%
American Independent	512,288	296,689	57.91%
Other	483,052	255,375	52.87%

Turnout by Political Party (by Region)
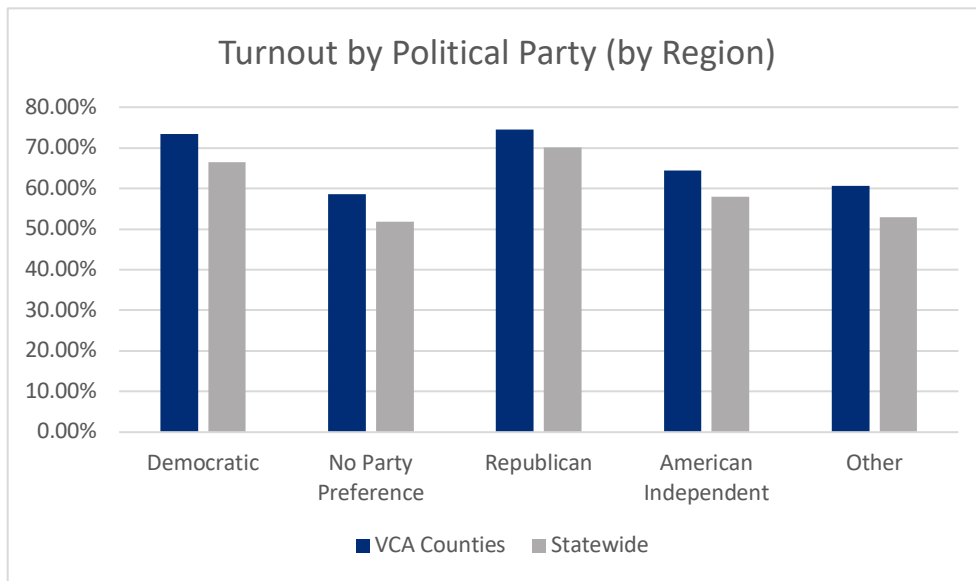
Methods of Voting

The VCA allows multiple methods of casting a ballot, giving voters a choice of how, when, and where they vote. Voters could choose to vote by mail, deposit a completed VBM ballot at a drop box or vote center, or receive and cast a ballot in person at a vote center. As expected, the ability to return a VBM ballot by mail or by returning it to a drop box or vote center (collectively categorized as "vote by mail" in VoteCal) was very popular in the VCA counties.[27]

Additionally, if a prospective voter had not yet registered or if a voter needed to update their voter registration, they could register conditionally and cast a CVR ballot. And, if voters believed themselves to be properly registered but a vote center pollbook indicated otherwise, those voters had the option to cast a traditional provisional ballot. In this section, we explore the methods by which voters cast their ballots in the VCA counties. Also, although CVR ballots are included here, traditional provisional ballots are not

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[27] For a more information about the use of VBM ballots, including a detailed breakdown of how VBM ballots were returned, see the table on page 32, *VBM Ballot Return Method in the VCA Counties*.

analyzed until a later section. This is because only 378 traditional provisional ballots were cast in the VCA counties during the November election.

VBM vs In-Person (by Region)			
Region	Vote by Mail	In-Person	Ballots Cast
VCA Counties	871,912 (90.49%)	91,647 (9.51%)	963,559
Statewide	8,365,663 (66.55%)	4,205,522 (33.45%)	12,571,185

Voting Method (by County)			
	Vote Method		
County	Vote by Mail	Vote Center	CVR	Ballots Cast
Madera	34,526 (88.77%)	3,549 (9.12%)	820 (2.11%)	38,895
Napa	56,351 (98.56%)	43 (0.08%)	781 (1.37%)	57,175
Nevada	50,525 (92.48%)	3,307 (6.05%)	799 (1.46%)	54,631
Sacramento	474,715 (90.78%)	37,172 (7.11%)	11,040 (2.11%)	522,927
San Mateo	255,795 (88.26%)	29,077 (10.03%)	4,953 (1.71%)	289,825
VCA Counties	871,912 (90.50%)	73,148 (7.59%)	18,393 (1.91%)	963,453

Voting Methods by Age

As VCA county voters increased in age, so did their propensity to vote by mail; however all voters used that method of voting much more frequently than any other. Voters between age 18 and 64 were more likely to cast a vote-by-mail ballot than they were to receive and cast a ballot at a vote center. Compared to all other voters, those age 65 and older were even more likely to cast a vote-by-mail ballot rather than casting a VBM ballot at a vote center.

One notable change observed between the primary and general elections was the large increase in in-person voting among all groups, especially younger voters.[28]

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[28] See Appendix C for the table with this data.

Voting Method by Age (VCA Counties, General Election) [29],[30]						
	Age					
Vote Method	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
Vote by Mail	55,612 (85.50%)	107,847 (86.67%)	123,184 (88.80%)	144,708 (90.22%)	179,887 (92.43%)	256,104 (95.72%)
Vote Center	6,941 (10.67%)	13,596 (10.93%)	13,696 (9.87%)	14,354 (8.95%)	13,555 (6.96%)	10,566 (3.95%)
CVR	2,490 (3.83%)	2,994 (2.41%)	1,833 (1.32%)	1,327 (0.83%)	1,180 (0.61%)	877 (0.33%)
Ballots Cast	**65,043**	**124,437**	**138,713**	**160,389**	**194,622**	**267,547**

Voting Method by Age (Statewide, General Election)						
	Age					
Vote Method	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
Vote by Mail	614,515 (64.02%)	1,098,900 (63.13%)	1,137,705 (63.33%)	1,301,528 (62.49%)	1,651,359 (66.23%)	2,536,275 (75.58%)
Polling Place	324,982 (33.86%)	612,769 (35.2%)	635,676 (35.38%)	758,295 (36.41%)	818,905 (32.85%)	800,843 (23.86%)
Vote Center	6,955 (0.72%)	13,610 (0.78%)	13,711 (0.76%)	14,361 (0.69%)	13,561 (0.54%)	10,573 (0.32%)
CVR	11,563 (1.20%)	12,892 (0.74%)	6,513 (0.36%)	4,752 (0.23%)	4,456 (0.18%)	3,654 (0.11%)
Early	1,794 (0.19%)	2,573 (0.15%)	2,926 (0.16%)	3,987 (0.19%)	4,939 (0.2%)	4,618 (0.14%)
Ballots Cast	**959,809**	**1,740,744**	**1,796,531**	**2,082,923**	**2,493,220**	**3,355,963**

Voting Methods by Ethnicity

Voting methods varied more among ethnic groups than they did between age groups. While vote by mail was still most frequently used overall, voters in the VCA counties who identified as white (non-Hispanic) or did not provide their ethnicity were most likely to cast VBM ballots. Voters who identified as black (non-Hispanic), multi-racial, Hispanic, and American Indian or Native Alaskan cast a higher percentage of CVR ballots than any other group.

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[29] One hundred six votes were marked as polling place voters, which is not an available voting method in VCA counties. Accordingly, they were excluded from this analysis.
[30] Vote methods for voters with invalid ages are not reported here.

Voting Method by Self-Reported Ethnicity (VCA Counties)							
	Ethnicity (Self-Reported)						
Vote Method	No Ethnic Info Available	White, not of Hispanic Origin	Asian or Pacific Islander	Hispanic	Black, not of Hispanic Origin	Multi-racial	Other	American Indian or Alaskan Native
Vote by Mail	665,636 (91.80%)	119,214 (91.26%)	32,777 (89.60%)	27,846 (85.08%)	8,909 (83.86%)	8,960 (85.36%)	5,610 (89.66%)	983 (87.07%)
Vote Center	52,393 (7.23%)	9,671 (7.40%)	3,287 (8.99%)	4,132 (12.62%)	1,419 (13.36%)	1,272 (12.12%)	572 (9.14%)	119 (10.54%)
CVR	7,042 (0.97%)	1,751 (1.34%)	517 (1.41%)	753 (2.30%)	296 (2.79%)	265 (2.52%)	75 (1.20%)	27 (2.39%)
Ballots Cast	725,071	130,636	36,581	32,731	10,624	10,497	6,257	1,129

Voting Method by Self-Reported Ethnicity (Statewide)							
	Ethnicity (Self-Reported)						
Vote Method	No Ethnic Info Available	White, not of Hispanic Origin	Asian or Pacific Islander	Hispanic	Black, not of Hispanic Origin	Multi-racial	Other	American Indian or Alaskan Native
Vote by Mail	6,312,787 (65.54%)	1,078,595 (75.80%)	270,273 (77.46%)	317,302 (66.22%)	74,230 (65.51%)	82,334 (71.04%)	205,467 (64.63%)	9,148 (71.78%)
Polling Place	3,221,102 (33.44%)	326,107 (22.92%)	72,597 (20.81%)	153,370 (32.01%)	36,314 (32.05%)	31,092 (26.83%)	111,221 (34.98%)	3,357 (26.34%)
Vote Center	52,391 (0.54%)	9,677 (0.68%)	3,286 (0.94%)	4,138 (0.86%)	1,419 (1.25%)	1,269 (1.09%)	571 (0.18%)	119 (0.93%)
CVR	29,970 (0.31%)	5,841 (0.41%)	1,852 (0.53%)	3,376 (0.70%)	1,177 (1.04%)	916 (0.79%)	633 (0.20%)	107 (0.84%)
Early	15,780 (0.16%)	2,735 (0.19%)	894 (0.26%)	948 (0.20%)	177 (0.16%)	285 (0.25%)	21 (0.01%)	14 (0.11%)
Ballots Cast	9,632,030	1,422,955	348,902	479,134	113,317	115,896	317,913	12,745

Voting Method by Self-Reported Ethnicity (VCA Counties)
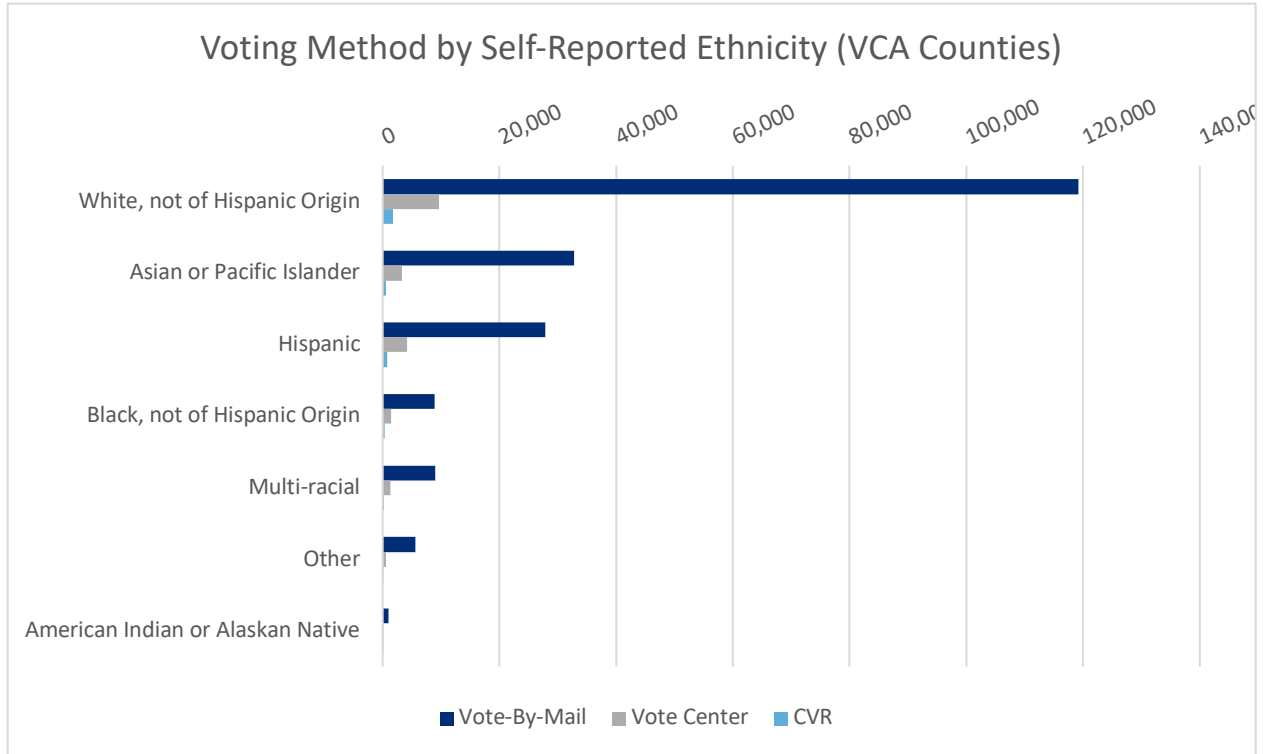
Voting Methods by Language Preference

A majority of voters who requested election materials in a language other than English cast VBM ballots. Voters who requested Spanish or Hindi materials were the most likely to receive and cast a ballot at a vote center; however, they both still strongly favored vote by mail.

Voting Method by Non-English Language Preference (VCA Counties)							
	Language						
Vote Method	Spanish	Chinese	Vietnamese	Filipino	Korean	Hindi	Other
Vote By Mail	8,044 (88.74%)	2,780 (94.88%)	660 (96.07%)	345 (95.30%)	236 (96.33%)	182 (89.22%)	211 (90.95%)
Vote Center	840 (9.27%)	125 (4.27%)	22 (3.20%)	14 (3.87%)	7 (2.86%)	20 (9.80%)	20 (8.62%)
CVR	181 (2.00%)	25 (0.85%)	5 (0.73%)	3 (0.83%)	2 (0.82%)	2 (0.98%)	1 (0.43%)
Ballots Cast	9,065	2,930	687	362	245	204	232

Voting Method by Non-English Language Preference (Statewide)							
	Language						
Vote Method	**Spanish**	**Chinese**	**Vietnamese**	**Korean**	**Filipino**	**Hindi**	**Other**
Vote by Mail	133,662 (56.27%)	47,684 (82.12%)	42,364 (86.89%)	17,358 (80.61%)	5,971 (72.42%)	872 (75.96%)	3,128 (74.99%)
Polling Place	102,072 (42.97%)	10,082 (17.36%)	6,199 (12.71%)	4,091 (19.00%)	2,239 (27.16%)	251 (21.86%)	1,002 (24.02%)
Vote Center	841 (0.35%)	124 (0.21%)	22 (0.05%)	7 (0.03%)	14 (0.17%)	20 (1.74%)	20 (0.48%)
CVR	765 (0.32%)	122 (0.21%)	103 (0.21%)	32 (0.15%)	18 (0.22%)	5 (0.44%)	16 (0.38%)
Early	216 (0.09%	53 (0.09%)	67 (0.14%)	45 (0.21%)	3 (0.04%)	0 (0.00%)	5 (0.12%)
Ballots Cast	**237,556**	**58,065**	**48,755**	**21,533**	**8,245**	**1,148**	**4,171**

Voting Method by Non-English Language Preference (VCA Counties)
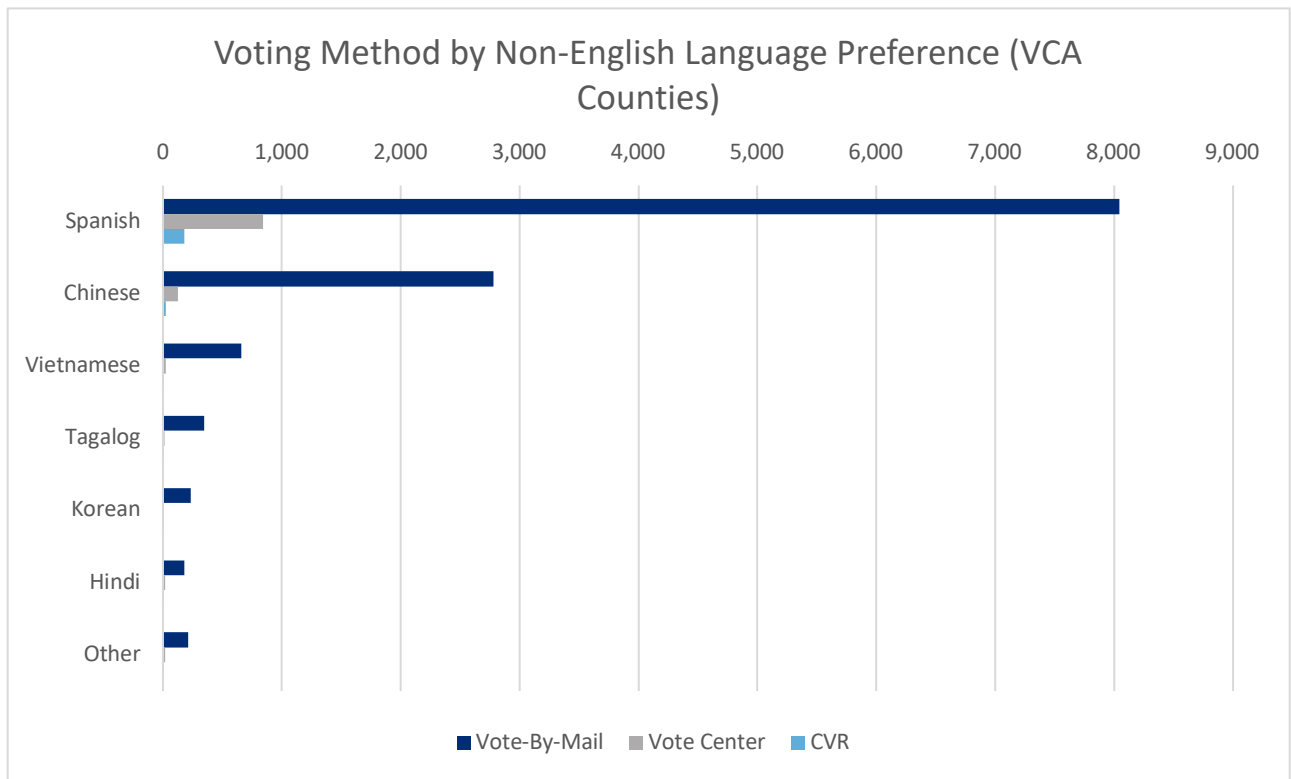
Voting Methods by Party Affiliation

There was almost no variation among the political parties in terms of voting method; all parties demonstrated a distinct preference for vote by mail.

Vote Method by Political Party (VCA Counties)					
	Party				
Vote Method	Democratic	Republican	No Party Preference	American Independent	Other
Vote by Mail	406,891 (91.09%)	223,062 (93.10%)	195,288 (89.93%)	22,218 (90.27%)	22,476 (88.30%)
Vote Center	34,667 (7.76%)	14,971 (6.25%)	19,047 (8.77%)	1,972 (8.01%)	2,208 (8.67%)
CVR	5,154 (1.15%)	1,565 (0.65%)	2,815 (1.30%)	423 (1.72%)	769 (3.02%)
Ballots Cast	446,712	239,598	217,150	24,613	25,453

Vote Method by Political Party (Statewide)					
	Party				
Vote Method	Democratic	Republican	No Party Preference	American Independent	Other
Vote by Mail	3,776,306 (66.00%)	2,308,858 (69.33%)	1,891,745 (66.65%)	208,868 (70.04%)	164,357 (64.36%)
Polling Place	1,880,324 (32.86%)	993,962 (29.85%)	910,633 (32.08%)	83,860 (28.27%)	86,378 (33.82%)
Vote Center	34,663 (0.61%)	14,973 (0.45%)	19,055 (0.67%)	1,972 (0.66%)	2,207 (0.86%)
CVR	21,748 (0.38%)	6,346 (0.19%)	12,110 (0.43%)	1,532 (0.52%)	2,135 (0.84%)
Early	8,922 (0.16%)	6,206 (0.19%)	4,977 (0.18%)	457 (0.15%)	292 (0.11%)
Ballots Cast	5,721,963	3,330,345	2,838,520	296,689	255,369

Voting Methods by Permanent Vote by Mail Status

When registering to vote in California, voters can indicate whether they wish to be classified as permanent vote-by-mail (PVBM) voters. In non-VCA counties, PVBM voters are mailed ballots, which they can then return by mail or at specified locations, while non-PVBM voters must either vote in person or make a one-time request for a mail ballot. In the VCA counties, this distinction is no longer meaningful because by default, all voters receive a ballot in the mail. Additionally, there is evidence to suggest that both new and existing VCA county voters are being assigned as PVBM voters, which would further skew any historical distinction between PVBM and non-PVBM voters. Regardless, when analyzing VCA county voters based on their status as PVBM or non-PVBM voters, a clear pattern emerges.

Non-PVBM voters were much more likely than PVBM voters to receive and cast a ballot in a vote center, and PVBM voters were far more likely to vote by mail.

Voting Method by Prior VBM Status (VCA Counties)		
	Prior Vote-By-Mail Status	
Vote Method	**Not PVBM**	**PVBM**
Vote by Mail	207,436 (81.52%)	662,499 (94.77%)
Vote Center	43,287 (17.01%)	29,578 (4.23%)
CVR	3,749 (1.47%)	6,977 (1.00%)
Ballots Cast	**254,472**	**699,054**

Voting Method by Prior VBM Status (Statewide)		
	Prior Vote-By-Mail Status	
Vote Method	**Non-PVBM**	**PVBM**
Vote by Mail	569,014 (14.59%)	7,781,122 (91.08%)
Polling Place	3,258,071 (83.54%)	697,089 (8.16%)
Vote Center	43,287 (1.11%)	29,583 (0.35%)
CVR	15,352 (0.39%)	28,520 (0.33%)
Early	14,289 (0.37%)	6,565 (0.08%)
Ballots Cast	**3,900,013**	**8,542,879**

Voting Method by Prior VBM Status (VCA Counties)

PVBM
- CVR: 6,977
- Vote Center: 29,578
- Vote-By-Mail: 662,499

Not PVBM
- CVR: 3,749
- Vote Center: 43,287
- Vote-By-Mail: 207,436

(x-axis: 0 – 700,000)

Legend: ■ CVR ■ Vote Center ■ Vote-By-Mail
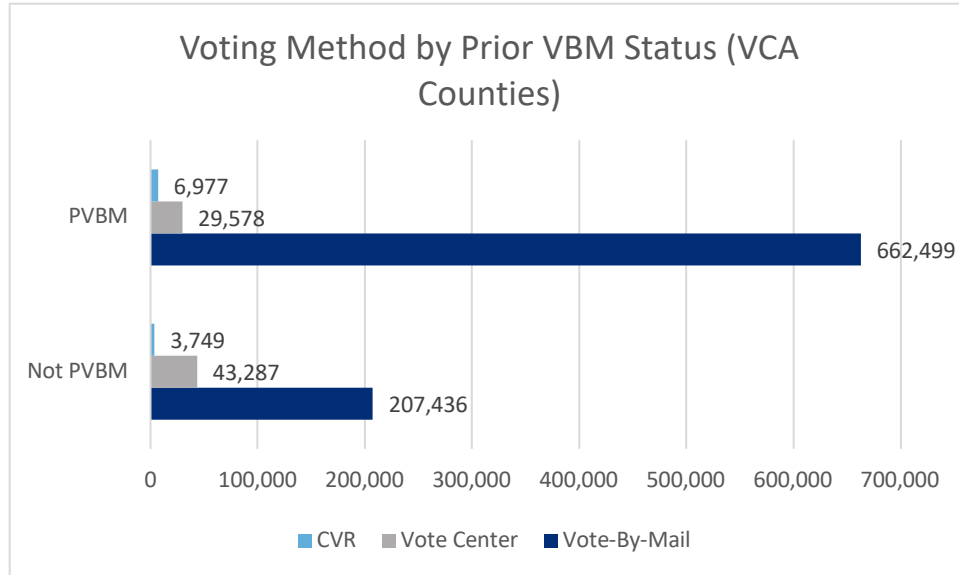
In-Person Voting: A Further Analysis

The VCA expanded voters' in-person early voting options. Starting 28 days before Election Day, voters could drop off their ballots at a drop box, and at least 10 days before Election Day, vote centers became available. By no later than 10 days before Election Day, one vote center was required for every 50,000 voters. Then, four days before Election Day, one vote center was required for every 10,000.

Vote centers, drop boxes, and drop off locations in every county saw very little traffic for most of the days they were available, with a sharp increase in participation during the final two or three days prior to Election Day. Among vote centers, Election Day alone accounted for 82.9 percent of all activity for the four weeks they were open. Less than 5 percent of all vote center activity took place in the first three weeks of the election period.

Vote Center Daily Returns by County
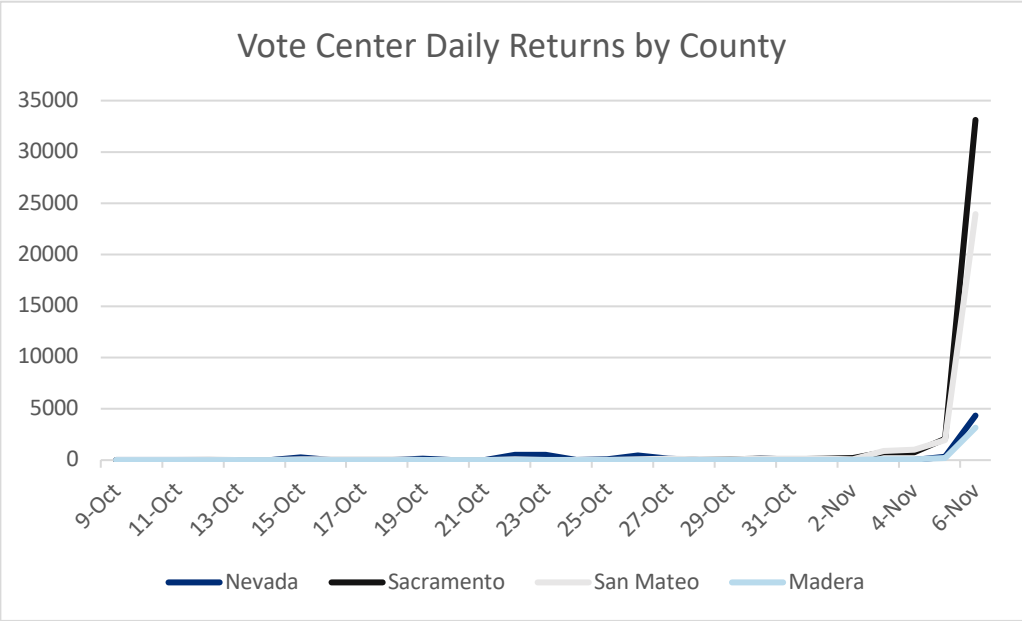
While drop box activity was slightly more spread out across the election period, there was still a dramatic increase in ballot drop offs in the final few days.

Drop Box Daily Returns by County
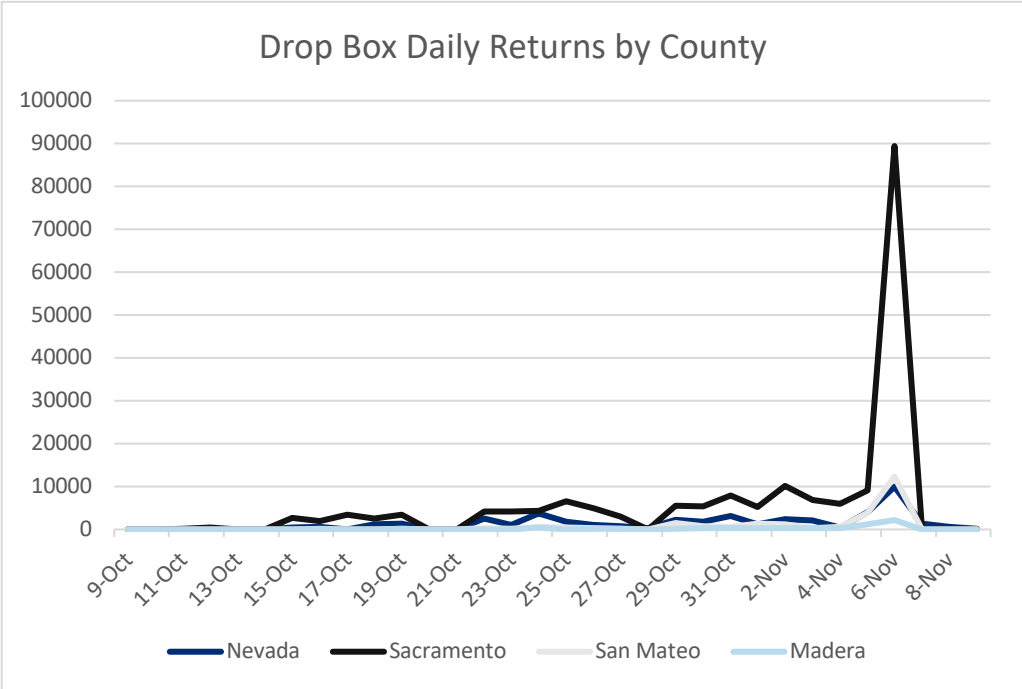
VBM Ballot Voting: A Further Analysis

Casting a vote-by-mail ballot was by far the most common method of voting in the VCA counties; 883,768 VBM ballots were cast in the November 2018 General Election. Overall, in the VCA counties 98.65 percent of VBM ballots were cast and counted, indicating that a very low number of ballots were rejected.

VBM Acceptance Rates by County			
County	VBM Ballots Cast	VBM Ballots Accepted	% Accepted
Madera	36,503	34,524	94.58%
Napa	58,554	56,351	96.24%
Nevada	51,391	50,525	98.31%
Sacramento	478,568	474,667	99.18%
San Mateo	258,752	255,811	98.86%
Total VCA	883,768	871,878	98.65%
Statewide	8,468,000	8,229,222	97.18%

The majority of ballots delivered by mail were returned by mail as well. Similarly, most UOCAVA ballots, regardless of delivery method, were returned by mail. Notably, however, UOCAVA ballots that were sent by email were returned via fax more often than any other ballot type. A majority of ballots that were picked up from a vote center counter were also returned at a vote center drop box. Interestingly, a large portion of voters who received a replacement ballot from a vote center counter returned their ballot at a drop off location.

Compared to the June primary election, voters were more likely to return their ballots in person. During the general election, voters returned VBM ballots to drop boxes at a rate 8.66 percentage points higher than during the primary election. A similar pattern emerged among voters who received a replacement ballot by mail; these voters returned their ballots by mail at a rate 13.97 percentage points lower than during the primary election and returned their ballots by drop box at a rate 12.85 percentage points higher.

VBM Ballot Delivery Method by Ballot Return Method (VCA Counties)						
	Ballot Return Method					
Ballot Delivery Method	**Mail**	**Drop Box**	**Vote Center Drop Off**	**Drop Off Location**	**Fax**	**Other**	**VBM Ballots Cast**
Mail	406,289 (47.33%)	250,705 (29.20%)	184,326 (21.47%)	17,084 (1.99%)	63 (0.01%)	8 (0%)	**858,475**
Replacement Ballot - Mail	5,958 (42.09%)	4,100 (28.97%)	3,844 (27.16%)	102 (0.72%)	145 (1.02%)	6 (0.04%)	**14,155**
Vote Center Counter	737 (13.25%)	775 (13.93%)	3,777 (67.90%)	272 (4.89%)	2 (0.04%)	0 (0%)	**5,563**
Replacement Ballot - Counter	797 (31.43%)	503 (19.83%)	683 (26.93%)	541 (21.33%)	2 (0.08%)	10 (0.39%)	**2,536**
UOCAVA - Email	925 (56.27%)	9 (0.55%)	2 (0.12%)	8 (0.49%)	678 (41.24%)	22 (1.34%)	**1,644**
UOCAVA - Mail	696 (90.63%)	7 (0.91%)	9 (1.17%)	2 (0.26%)	52 (6.77%)	2 (0.26%)	**768**
UOCAVA - Other	69 (90.79%)	2 (2.63%)	2 (2.63%)	1 (1.32%)	2 (2.63%)	0 (0%)	**76**

VBM Ballot Delivery Method by Return Method (VCA Counties)
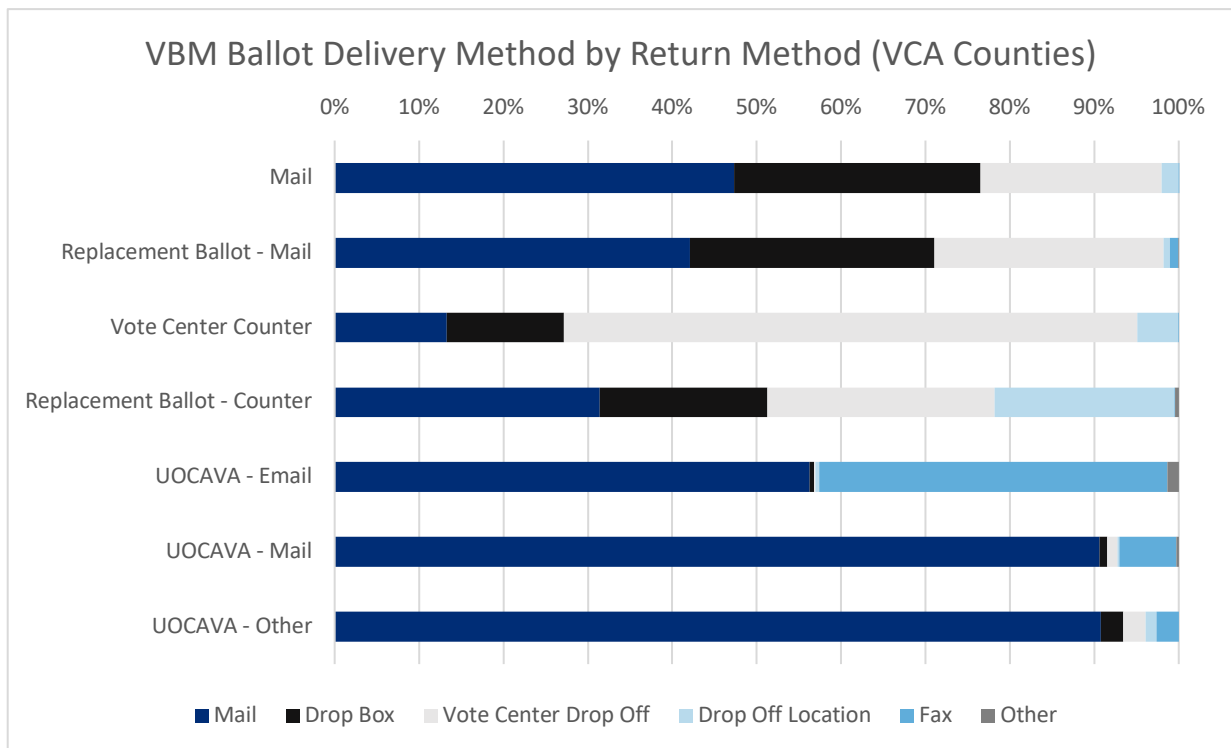
While VBM ballot return methods for the most part did not vary much by age group, voters 65 and older did submit their ballots by mail at a higher rate than all other age groups.

VBM Ballot Return Method by Age (VCA Counties)[31]						
	Age					
Ballot Return Method	**18-24**	**25-34**	**35-44**	**45-54**	**55-64**	**65+**
Mail	11,411 (49.72%)	26,026 (51.60%)	31,831 (49.83%)	42,717 (50.55%)	65,002 (51.95%)	122,981 (57.55%)
Vote Center Drop Off	6,293 (27.42%)	13,582 (26.93%)	18,222 (28.53%)	23,023 (27.25%)	30,349 (24.25%)	38,193 (17.87%)
Drop Off Location	5,235 (22.81%)	10,787 (21.39%)	13,781 (21.58%)	18,706 (22.14%)	29,706 (23.74%)	52,412 (24.53%)
Fax	9 (0.04%)	34 (0.07%)	33 (0.05%)	34 (0.04%)	36 (0.03%)	51 (0.02%)
Other	3 (0.01%)	11 (0.02%)	7 (0.01%)	19 (0.02%)	43 (0.03%)	69 (0.03%)
Total Returned	**22,951**	**50,440**	**63,874**	**84,499**	**125,136**	**213,706**

VBM Ballot Return Method by Age (VCA Counties)
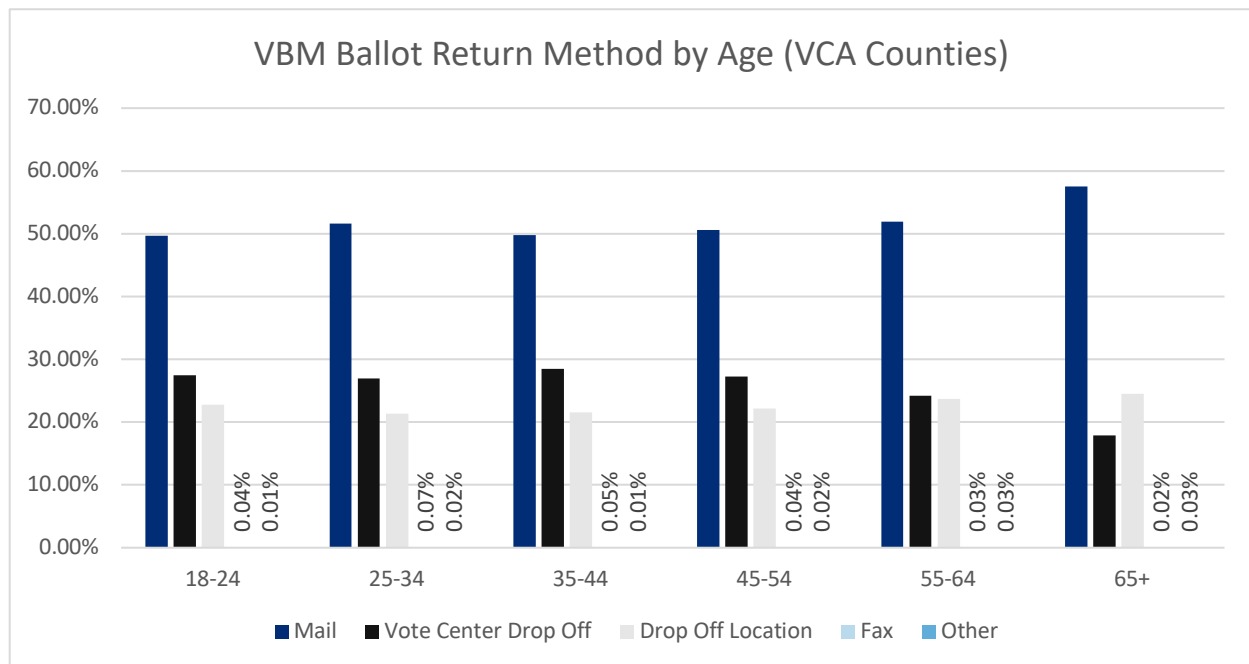
A plurality of both PVBM and non-PVBM voters submitted their ballots via mail, but PVBM voters were more likely than non-PVBM voters to submit their ballot by mail.

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[31] Voters with invalid ages were not presented in this table.

Conversely, non-PVBM voters submitted their ballots via vote center drop off more frequently than PVBM voters.

VBM Ballot Return Method by Prior VBM Status (VCA Counties)		
	Prior VBM Status	
Ballot Return Method	**Non-PVBM**	**PVBM**
Mail	72,695 (34.53%)	341,418 (50.94%)
Vote Center Drop Off	63,756 (30.28%)	128,418 (19.16%)
Drop Off Location	74,060 (35.18%)	199,458 (29.76%)
Fax	9 (0.00%)	929 (0.14%)
Other	10 (0.00%)	36 (0.01%)
Total	**210,530**	**670,259**

VBM Ballot Return Method by Prior VBM Status (VCA Counties)
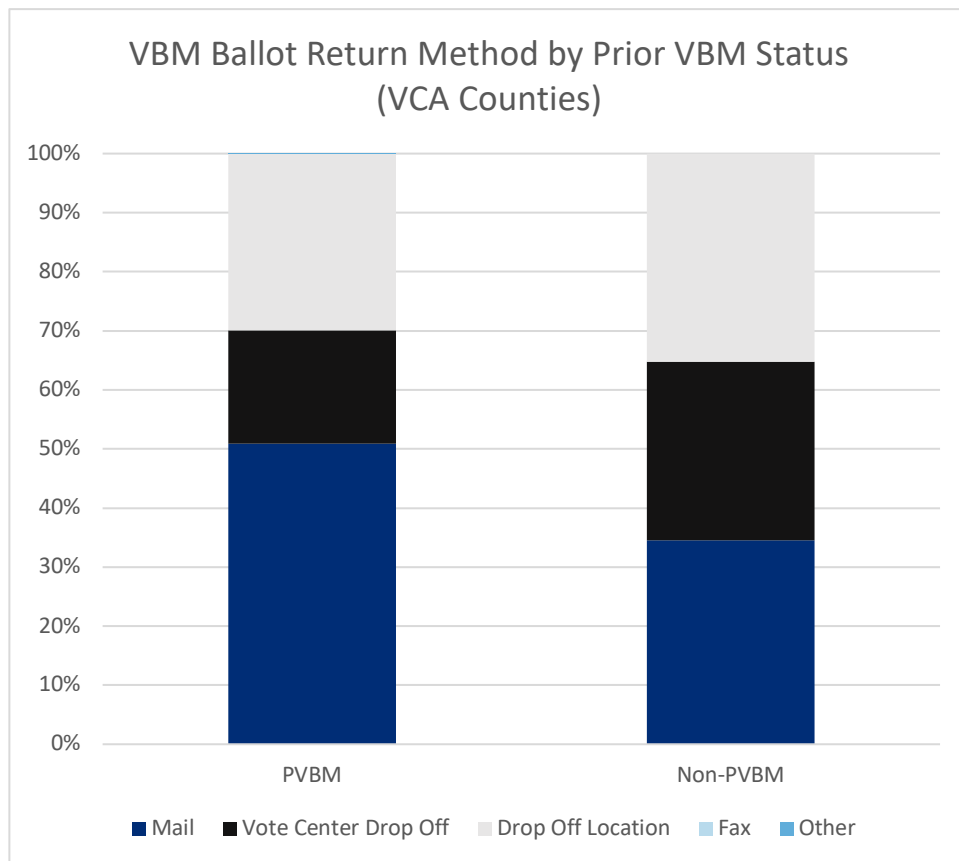
CVR and Provisional Voting: A Further Analysis

Under the Help America Vote Act, voters must be allowed to cast a provisional ballot if their registration is called into question and they declare themselves properly registered.[32] California recently expanded voter registration with Conditional Voter Registration (CVR), which allows voters to register conditionally after the ordinary registration deadline. By registering conditionally, voters are then able to cast a special kind of provisional ballot, a CVR ballot. This section explores the use of traditional provisional ballots and CVR ballots in the November 2018 General Election.

Provisional voting behavior was much different in the VCA counties compared to the state at-large. CVR provisional voting made up a large majority of provisional voting in the VCA counties, encompassing over 98 percent of all provisional ballots accepted. Nearly the opposite was true for all of California, where traditional provisional ballots made up over 94 percent of all provisional ballots accepted.

Within the VCA counties, CVR ballots accounted for nearly all provisional voting. The county with the highest provisional ballot use was Nevada, where non-CVR provisional ballots encompassed 6.6 percent of all provisional ballots. San Mateo county saw a 5.35 percentage point shift from provisional to CVR ballots cast from the primary election. All other VCA counties saw a very slight increase in the rate of provisional ballots.[33]

Provisional Ballot Use by Region			
	Ballot Type		
Region	**Provisional**	**CVR**	**Total**
VCA Counties	378 (1.99%)	18,579 (98.01%)	**18,957**
Statewide	930,439 (94.43%)	54,877 (5.57%)	**985,316**

The large majority of CVR ballots were accepted in every county, indicating those who registered conditionally were highly likely to have their ballot counted. The highest rejection rate was recorded in Nevada County, which rejected 9.54 percent of all CVR ballots. Compared to the primary election, all counties in the November general saw higher CVR acceptance rates.[34]

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[32] Help America Vote Act of 2002, U.S. Code Chapter 146. §15482. "Provisional voting and voting information requirements." https://www.justice.gov/crt/chapter-146-election-administration-improvement.

[33] See Appendix C for the full table with this data.

[34] See Appendix C for the full table with this data.

Provisional Ballot Use by County			
	Ballot Type		
County	**Provisional**	**CVR**	**Total**
Madera	2 (0.24%)	824 (99.76%)	**826**
Napa	4 (0.49%)	806 (99.51%)	**810**
Nevada	63 (6.60%)	891 (93.40%)	**954**
Sacramento	284 (2.51%)	11,044 (97.49%)	**11,328**
San Mateo	25 (0.50%)	5,014 (99.50%)	**5,039**

CVR Acceptance Rates by Region			
Region	**CVR Cast**	**CVR Accepted**	**% Accepted**
VCA Counties	18,579	18,405	99.06%
Statewide	54,877	54,461	99.24%

CVR Acceptance Rates by County			
County	**CVR Cast**	**CVR Accepted**	**% Accepted**
Madera	824	820	99.51%
Napa	806	781	96.90%
Nevada	891	806	90.46%
Sacramento	11,044	11,042	99.98%
San Mateo	5,014	4,956	98.84%

Provisional ballot rejection varied significantly across the VCA counties, from 28.87 to 100 percent. However, most VCA counties also reported a very low number of provisional ballots, so it is not easy or advisable to attempt to decipher any clear pattern among their acceptance and rejection rates.

Provisional Acceptance Rates by Region[35]			
Region	**Provisionals Cast**	**Provisionals Accepted**	**% Accepted**
VCA Counties	378	203	53.70%
Statewide	930,439	889,318	95.58%

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[35] This table refers only to traditional provisional ballots and does not include CVR.

Provisional Acceptance Rates by County[36]			
County	Provisionals Cast	Provisionals Accepted	% Accepted
Madera	2	0	0.00%
Napa	4	1	25.00%
Nevada	63	0	0.00%
Sacramento	284	202	71.13%
San Mateo	25	0	0.00%

Rejected Ballots

In California, ballots can be rejected for a variety of reasons. Most of the ballots that were rejected in the VCA counties during the June 2018 primary election were rejected due to reasons unrelated to a voter's eligibility to vote. Instead, most rejected ballots were not counted because of an issue with their completeness (e.g., a signature was omitted) or their timeliness (the ballot was received too late). There was little variation in acceptance rates between the VCA counties and the rest of the state.

Total Ballot Acceptance Rates by Region			
Region	Ballots Cast	Ballots Accepted	% Accepted
VCA Counties	972,320	963,806	99.12%
Statewide	12,839,673	12,712,542	99.01%

In almost every VCA county, a problem with the voter's signature was the main reason VBM ballots were rejected, including missing or mismatched ballot signatures. The second most common reason for rejection was that the ballot was not received on time. For CVR and provisional ballots, incomplete or illegible ballots or envelopes were the primary cause of ballot rejection. Some provisional ballots were also rejected for voters having already voted or not being properly registered in the county.

Compared to the primary election, voters in the VCA counties were much less likely to have their ballots rejected due to being received too late. However, the frequency of ballots being rejected due to mismatching signatures increased in the general election.

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[36] This table refers only to traditional provisional ballots and does not include CVR.

Ballot Rejection Reason by County						
	County					
Ballot Rejection Reason	Madera	Napa	Nevada	Sacramento	San Mateo	Total VCA
Ballot was not received on time	91 (15.48%)	214 (46.83%)	0 (0.00%)	1,190 (29.89%)	1,914 (63.40%)	**3,409 (40.04%)**
Non-matching signature	255 (43.37%)	57 (12.47%)	21 (4.48%)	1,612 (40.49%)	123 (4.07%)	**2,068 (24.29%)**
No voter signature	133 (22.62%)	135 (29.54%)	17 (3.62%)	1,076 (27.03%)	586 (19.41%)	**1,947 (22.87%)**
Please contact your county for further information.	66 (11.22%)	27 (5.91%)	351 (74.84%)	10 (0.25%)	300 (9.94%)	**754 (8.86%)**
Voter already voted	21 (3.57%)	4 (0.88%)	39 (8.32%)	76 (1.91%)	26 (0.86%)	**166 (1.95%)**
In Review	15 (2.55%)	5 (1.09%)	10 (2.13%)	0 (0.00%)	29 (0.96%)	**59 (0.69%)**
Ballot missing from envelope	0 (0.00%)	0 (0.00%)	15 (3.20%)	11 (0.28%)	31 (1.03%)	**57 (0.67%)**
Envelope was incomplete and/or illegible	0 (0.00%)	15 (3.28%)	7 (1.49%)	0 (0.00%)	2 (0.07%)	**24 (0.28%)**
Voter deceased	6 (1.02%)	0 (0.00%)	5 (1.07%)	6 (0.15%)	7 (0.23%)	**24 (0.28%)**
Missing or incorrect address on envelope	0 (0.00%)	0 (0.00%)	3 (0.64%)	0 (0.00%)	0 (0.00%)	**3 (0.04%)**
Envelope and/or ballot was incomplete and/or illegible	0 (0.00%)	0 (0.00%)	1 (0.21%)	0 (0.00%)	1 (0.03%)	**2 (0.02%)**
Multiple ballots returned in one envelope	1 (0.17%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	**1 (0.01%)**
Total Rejected	**588**	**457**	**469**	**3,981**	**3,019**	**8,514**

Ballot Rejection Reasons by Region		
	Region	
Reason	**VCA Counties**	**Statewide**
Ballot was not received on time	3,409 (40.04%)	21,345 (16.79%)
Please contact your county for further information.	754 (8.86%)	53,708 (42.25%)
Non-matching signature	2,068 (24.29%)	24,281 (19.10%)
No voter signature	1,947 (22.87%)	11,106 (8.74%)
Voter already voted	166 (1.95%)	2,617 (2.06%)
Voted wrong ballot	0 (0.00%)	4,569 (3.59%)
Voter not registered	0 (0.00%)	4,466 (3.51%)
In Review	59 (0.69%)	2,353 (1.85%)
Missing or incorrect address on envelope	3 (0.04%)	1,159 (0.91%)
Ballot missing from envelope	57 (0.67%)	301 (0.24%)
Voter deceased	24 (0.28%)	213 (0.17%)
Voted in wrong county	0 (0.00%	427 (0.34%)
Envelope was incomplete and/or illegible	24 (0.28%)	40 (0.03%)
Envelope and/or ballot was incomplete and/or illegible	2 (0.02%)	289 (0.23%)
Multiple ballots returned in one envelope	1 (0.01%)	228 (0.18%)
Multiple Reasons/Other	0 (0.00%)	29 (0.02%)
Total Rejected	**8,514**	**127,131**

RAVBM and Voters with Disabilities

The use of accessible voting options can be difficult to quantify since little data exists on who is using those options and how frequently, especially in person. However, Remote Accessible Vote-By-Mail (RAVBM) ballots are one accessible voting option that deserves more attention. This ballot type allows voters with disabilities and UOCAVA voters to download a ballot online and use an accessible program to mark the ballot, and then print and submit it by mail or at a drop-off location.

RAVBM Ballots by County			
County	# Issued	# Returned	% Returned
Madera	8	4	50%
Napa	2	0	0%
Nevada	60	NA	NA
Sacramento	152	39	25.66%
San Mateo	562	102	18.15%

Observations & Discussion

In this section, we discuss some of this report's main findings and observations. Where appropriate, comparisons are made between the 2018 primary election and the 2018 general election. However, a number of factors tend to make primary and general elections distinct from one another, limiting the usefulness of certain comparisons.[37]

Throughout both the primary and general elections, there was a clear pattern of voters submitting their ballot only in the final days of the election period. When asked about major challenges in implementation of the VCA, nearly every county office noted a drastic uptick in vote center activity in the final two to three days of the election period. While vote centers were open up to four weeks before Election Day, only 5 percent of all vote center ballots were cast during the first three weeks of their opening. Election Day itself accounted for 82.9 percent of all vote center voting. This trend was especially prevalent among vote centers, but similar patterns were observed at drop boxes as well. The pattern was consistent across every county and both elections.

Although voters continued to vote closer to Election Day, 1,197 fewer ballots were rejected due to being late during the November 2018 General Election compared to the June Primary.[38] In fact, only 8,514 ballots were rejected for any reason in the VCA counties during the general election—an increase of just 1,450 ballots compared to the primary election. Despite this increase, the rejection rate actually dropped from 1.2 percent in the primary election to 0.9 percent in the general since many more ballots were cast overall in the latter.[39] Lacking or having a mismatched signature on the ballot was the number one reason VBM ballots were rejected during the general election (the number of ballots rejected for this reason was 84 percent greater than during the June primary).

This report's analyses also unveiled several interesting patterns surrounding voting method behavior, both within the general election and as compared to the primary. Perhaps most importantly, the primary and general elections showed that voters are taking advantage of both in-person *and* mail voting options. Although less than 10 percent of voters in both the primary and general elections cast a ballot in person at a vote center,[40] a significant portion of voters who returned VBM ballots did so by dropping them off at a

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[37] For example, this report will not directly compare the turnout of the 2018 primary election with the 2018 general election. This is because the electorate is usually different between primary and general elections, meaning that any comparison of turnout would involve comparing two different populations of voters.

[38] In the June Primary Election, 4,606 ballots were rejected for being late. In the November General Election, only 3,409 ballots were rejected for that reason—a 26 percent decrease.

[39] In the November General Election, 8,514 ballots were rejected out of 972,320 total ballots. In the June Primary Election, 7,064 ballots were rejected out of 591,052 total ballots.

[40] In the June Primary Election, 5.68 percent of ballots were cast at a vote center. In the November General Election, 8.36 percent of ballots were cast at a vote center.

vote center or drop box. The drop off option was actually the most popular choice among general election voters, accounting for 48 percent of ballots cast.[41]

Some interesting patterns also emerged in the voting methods used by various demographic groups. For one, younger voters were far more likely to vote in person than their older counterparts. While all age groups mostly submitted cast VBM ballots, voters age 18 to 24 voted at vote centers far more often than voters over the age of 65. In fact, the frequency of 18- to 24-year-olds voting in person was about 10 percentage points higher than that of voters over 65.

Variation in methods of voting was even more distinct among ethnic groups. Among all VCA voters, those who identified as black, Hispanic, or multi-racial voted in person (vote center or CVR) at a frequency about 6 to 8 percentage points higher than those who identified as white or Asian. Similarly, white and Asian voters voted by mail at a frequency about 6 to 8 points higher than black, Hispanic, and multi-racial voters. Notably though, these figures are coming from the roughly 20 percent of voters who provided ethnic information in their registration. We must be cautious in drawing conclusions from these patterns. However, we also found that the 22.47 percent of VCA voters who registered via online voter registration (OVR) were far more likely to include their ethnic identity in their registration. In fact, 78.58 percent of voters who registered through OVR identified their ethnicity when registering. This means that if we isolate our analysis to only those voters who registered via OVR, we can be much more assured of our claims about voting behavior among ethnic groups. Interestingly, the patterns among OVR voters closely resembled those of the broader population, giving us more confidence in our observations. Among those who registered via OVR, the frequency of black voters voting in person was almost double that of their white counterparts (16.21 percent versus 8.71 percent).

Another way to explore this trend is through VBM ballot return methods. As defined in this report, "in-person" voting includes voting at a vote center or by CVR. However, there are some in the field who consider submitting a VBM ballot at a drop box or other drop off location as a form of in-person voting as compared to submitting a ballot by mail. After reevaluating the data with that assumption, an even clearer contrast is shown between how different ethnic groups return their VBM ballots. Black voters submitted their ballots via drop-off over 70 percent of the time, while white and Asian voters only did so at rates of about 45-49 percent. This adds to our growing evidence that voters who identify as black are far more likely than their white and Asian counterparts to vote in person, regardless of how in-person voting is defined.

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[41] Returning a ballot by mail was the second most popular voting method with 43 percent of ballots cast.

Conclusion

The California Secretary of State is required to submit a report to the State Legislature on the implementation of the Voter's Choice Act (VCA) pursuant to SB 450 (Chapter 832, 2016), under California Elections Code section 4005(g)(1)(A). This report illustrates research and findings from California's implementation of the Voter's Choice Act during the November 2018 General Election. This report provides context to understand the implementation of the VCA in the November General Election; however, further research is necessary to study the long-term impact of the new law.

Signed into law in 2016, the VCA is a new elections model that allows voters to choose how, when, and where to cast their ballot by mailing every voter a ballot, expanding in-person early voting, implementing same-day registration, and allowing voters to cast a ballot at any vote center within their county. The Secretary of State sponsored the VCA with extensive input from civil rights organizations, local elections officials, and community groups that represented a wide range of California voters. Every county that adopts the VCA model is required to draft and adopt a detailed plan through an open, public process and host workshops to educate voters and receive public input on how to implement the new law, including locations of vote centers and drop boxes.

In the five counties that implemented the VCA for the statewide general election, voter turnout was up and voters were provided with voting options that had not been previously available. Across the VCA counties and throughout the state, voter turnout increased compared to the 2010 general election (the most comparable general election in recent history). On average, VCA counties outperformed statewide turnout by 3.64 percentage points. Turnout in VCA counties was 54.09 percent, compared to the statewide average of 50.45 percent.

How voters cast their ballots differed somewhat between the first two VCA elections. Though both the June primary and November general were marked by an increase in the use of vote-by-mail (VBM) ballots, there was a notable shift in the way voters chose to return those ballots. During the June primary, the most popular voting method was vote by mail, accounting for over half of all ballots cast. That did not hold true for the general election, where 48 percent of ballots cast were returned to a drop off location, and 43 percent of ballots were returned by mail. Ultimately, more than 880,000 ballots were returned by mail or dropped off at a drop off location in the November general, and 97.18 percent of those ballots were cast and counted.

The November election marked the first general election where Californians could take advantage of same-day voter registration, which is referred to as conditional voter registration (CVR) in state law. In the five VCA counties, every vote center was required to offer CVR. Counties that implemented the VCA—Madera, Napa, Nevada, Sacramento, and San Mateo—led the way in CVR usage statewide. While the VCA counties accounted for just

6.96 percent of California's registered voter population in 2018, they accounted for 33.86 percent of the state's conditional voter registration usage.

In 2018, a major election reform was implemented to help Californians better exercise their voting rights—the VCA. Voters in VCA counties adapted and responded to the new election model, and implementation on the county level went smoothly. As the first general election under California's newest election model, the November election was marked by expanded accessibility to the ballot, along with more voting options and opportunities for Californians to register and vote.

Appendices

Appendix A

Demographic Information Sources

Demographic Information	Data Source
Race & Ethnicity	VoteCal—race and ethnicity are combined in VoteCal and only included in a voter's registration if the voter reports their race/ethnicity (most do not)
Language preference	VoteCal—voters can choose to receive election materials in a language other than English when registering to vote; if no language is selected, the field defaults to "English"
Age	VoteCal—age is required to determine voter eligibility, making this factor one of the most reliable
Gender	Included in VoteCal but the data was considered too unreliable to be part of this report
Disability	Anecdotal evidence—spoke with California disability experts about the state of accessible voting
Permanent vote by mail status	VoteCal—California voters can elect this status when registering
Historical polling place voters	Unavailable
Political party affiliation	VoteCal—included in voter file
Language minorities	Counties—reported on by VCA counties

Election Information Sources

Election Information	Data Source
Voter turnout	VoteCal and publicly available data—all of the VoteCal tables discussed in the Methodology section were used to compile voter turnout information; publicly available data was used to compare turnout to past elections
Voter registration	VoteCal
Ballot rejection	VoteCal—the tables specific to certain ballot types were used to determine the number of and reason for rejected ballots
Provisional ballot use	VoteCal
Accessible vote by mail ballot use	Counties—received information from VCA counties about remote accessible vote-by-mail (RAVBM) ballot use
Number of votes cast at each vote center	Counties
Number of ballots returned at ballot drop-off locations	Counties
Number of ballots returned by mail	VoteCal
Number of persons who registered to vote at a vote center	Included in VoteCal but the data was considered too unreliable to be part of this report
Instances of voter fraud	Anecdotal evidence (none found)
Any other problems that became known to election officials	Counties—received information from VCA county officials about problems they experienced during the election

Comparative Representativeness of Ethnicity Data

Recategorization for Comparison of Representativeness of Ethnicity Datasets						
	American Indian or Alaska Native	**Asian or Pacific Islander**	**Black or African American**	**White**	**Multiracial**	**Latino** (Hispanic/ Spanish)
CVAP Categories	American Indian or Alaska Native Alone	Asian Alone	Black or African American Alone	White Alone	American Indian or Alaska Native and White Asian and White Black or African American and White American Indian or Alaska Native and Black or African American Remainder of Two or More Race Responses	Hispanic or Latino
VoteCal Categories (omits	American Indian or Alaska Native Alone	Asian or Pacific Islander	Black, not of Hispanic Origin	White, not of Hispanic Origin	Multi-racial	Hispanic
PDI Categories (omits "T" and "Generic" unless specified)	N/A	Chinese Pacific Islander East Indian Filipino Korean Southeast Asian (Cambodian/Thai/Hmong) Japanese Chinese/ Korean/ Vietnamese	Identified as likely African American	White Armenian Persian Greek Jewish Jewish 2 Italian Arabic	Asian/Anglo Mixed	Latino (Hispanic/ Spanish)

Appendix B: Registration Demographics

Total Registration (Active Voters) VCA Counties vs. Statewide

Total Registration (by Region)	
Region	Registered Voters
Statewide	19,837,235
VCA Counties	1,380,981

Total Registration (Active Voters) VCA Counties

Total Registration (by County)	
County	Registered Voters
Madera	57,991
Napa	78,632
Nevada	69,713
Sacramento	771,219
San Mateo	403,426
Total VCA	1,380,981

Age Distribution (% of Registered Voters, by Region) VCA Counties vs. Statewide[1]

Age of Registered Voters (by Region)							
	Age						
Region	18-24	25-34	35-44	45-54	55-64	65+	Registered Voters
VCA Counties	130,879 (9.48%)	232,821 (16.86%)	216,958 (15.71%)	225,620 (16.34%)	248,063 (17.96%)	321,748 (23.30%)	1,376,089
Statewide	2,169,649 (10.94%)	3,605,487 (18.18%)	3,104,699 (15.65%)	3,169,634 (15.98%)	3,418,553 (17.23%)	4,344,719 (21.90%)	19,812,741

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[1] Voters with invalid ages were excluded from this analysis, as its purpose was to show the age distribution of registered voters.

Age of Registered Voters (by Region)
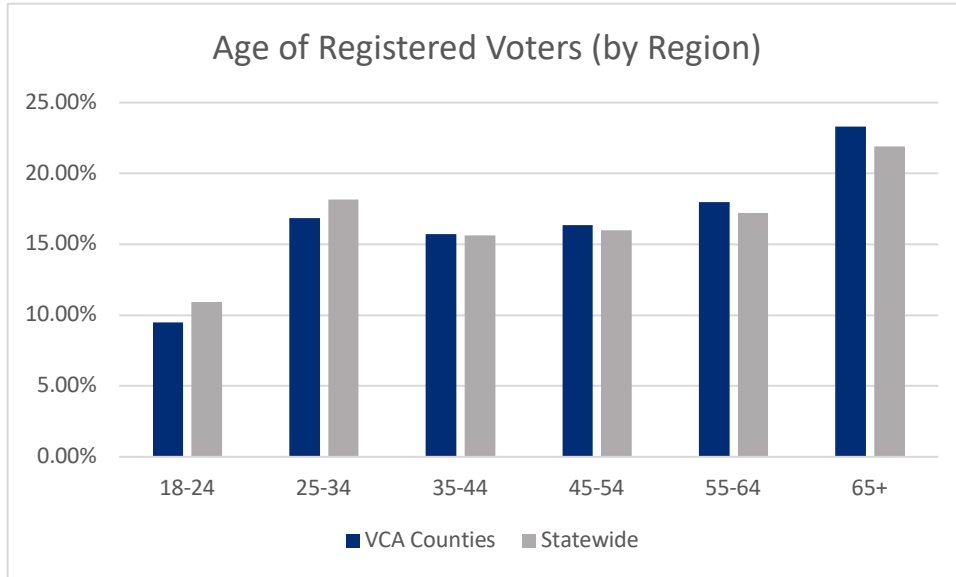
Self-Reported Ethnicity (% of Registered Voters, by Region)
VCA Counties vs. Statewide

Self-Reported Ethnicity of Registered Voters (by Region)									
	Ethnicity (Self-Reported)								
Region	No Ethnic Information Available	White, not of Hispanic Origin	Hispanic	Asian or Pacific Islander	Other	Black, not of Hispanic Origin	Multi-racial	American Indian or Alaskan Native	Registered Voters
VCA Counties	1,053,157 (76.26%)	173,407 (12.56%)	52,884 (3.83%)	58,629 (4.25%)	9,264 (0.67%)	16,239 (1.18%)	15,748 (1.14%)	1,653 (0.12%)	**1,380,981**
Statewide	15,560,821 (78.44%)	1,968,992 (9.93%)	801,063 (4.04%)	568,959 (2.87%)	564,881 (2.85%)	178,750 (0.90%)	174,262 (0.88%)	19,507 (0.10%)	**19,837,235**
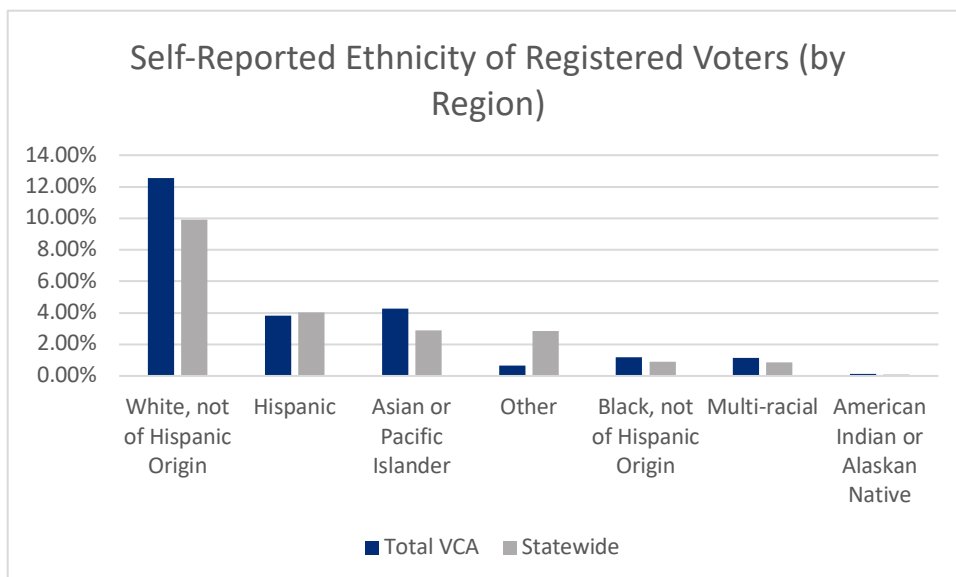
Language Preference (% of Registered Voters, by Region)
VCA Counties vs. Statewide

Non-English Language Preference of Registered Voters (by Region)								
	Language							
Region	Spanish	Chinese	Vietnamese	Tagalog	Korean	Hindi	Other	Registered Voters
Total VCA	14,838 (1.07%)	5,231 (0.38%)	1,239 (0.09%)	622 (0.05%)	482 (0.03%)	369 (0.03%)	402 (0.03%)	1,380,981
Statewide	430,336 (2.17%)	107,727 (0.54%)	78,237 (0.39%)	15,989 (0.08%)	42,765 (0.22%)	2,352 (0.01%)	8,597 (0.04%)	19,837,235

Party Affiliation (% of Registered Voters, by Region) VCA Counties vs. Statewide

Political Party of Registered Voters (by Region)						
	Party					
Region	Democratic	No Party Preference	Republican	American Independent	Other	Registered Voters
Total VCA	608,745 (44.08%)	370,581 (26.83%)	321,453 (23.28%)	38,215 (2.77%)	41,987 (3.04%)	1,380,981
Statewide	8,604,917 (43.38%)	5,482,256 (27.64%)	4,754,722 (23.97%)	512,288 (2.58%)	483,052 (2.44%)	19,837,235

Age distribution by registration source, VCA Counties

Registration Source by Age (VCA Counties)						
	Age					
Registration Source	18-24	25-34	35-44	45-54	55-64	65+
Other	12,546	32,551	45,965	80,065	114,133	178,466
Online Voter Registration	58,597	82,690	63,281	44,122	34,701	26,874
Department of Motor Vehicles	25,937	51,781	47,861	42,719	42,773	47,547
Other received by mail and not included above	18,203	30,823	29,711	31,626	31,318	40,120
National Change of Address (NCOA)	4,171	14,890	12,751	9,123	7,173	6,882
Other County Registrar	4,366	8,412	6,325	7,008	5,418	5,233
Secretary of State	1,773	3,079	3,603	3,500	3,657	4,566
Other Designated Agency not listed above	1,737	2,567	2,109	2,519	2,773	4,618
Other Public Assistance Agency not listed above	898	2,426	1,937	1,739	1,975	2,017
Office In Person	686	1,025	1,109	878	1,519	2,651

Registration drives from advocacy groups or political parties	1,452	1,169	986	1,301	1,370	1,538
Armed Forces Recruiting Centers	220	619	502	367	311	419
Failsafe Provisional Envelope	39	161	278	230	269	282
California Health Benefit Exchange Email	37	165	138	119	232	87
Federal Government Website (NVRA)	56	92	112	73	111	149
County Health/Social/Human/Family/In Home Services	28	86	79	52	77	95
California Health Benefit Exchange Website	12	54	45	42	84	42
Department of Public Social Services	22	43	40	36	35	44
Women, Infants, and Children (WIC)	28	79	35	8	7	1
Department of Rehabilitation	33	32	20	22	31	9
Mental Health Services	7	15	18	27	33	40
Voter	8	28	28	15	22	22
Department of Motor Vehicles by Mail	14	11	14	15	19	32
State assisted Disability Service Organizations	7	17	6	10	18	9
Regional Center	2	4	-	1	1	3
Address Change Service	-	2	1	1	1	1
California Department of Tax and Fee Administration	-	-	2	1	1	1
Independent Living Center	-	-	2	-	-	-
Deaf Hard of Hearing Services	-	-	-	-	1	-
Franchise Tax Board	-	-	-	1	-	-

Online registration by age, VCA Counties vs. Statewide

Online Voter Registration by Age						
	Age					
	18-24	25-34	35-44	45-54	55-64	65+
VCA Counties	44.77%	35.52%	29.17%	19.56%	13.99%	8.35%
Statewide	42.86%	34.12%	27.17%	18.94%	13.67%	8.68%

Language by registration source, VCA Counties

Registration Source by Language (VCA Counties)							
	Language						
Registration Source	Spanish	Chinese	Vietna-mese	Tagalog	Korean	Hindi	Other
Other	4,134	1,654	57	39	11	18	18
Online Voter Registration	3,350	1,120	409	179	151	160	112
Department of Motor Vehicles	2,850	1,177	423	158	201	80	104
Other received by mail and not included above	1,997	584	213	126	73	75	95
Other County Registrar	701	451	8	43	12	-	10
National Change of Address (NCOA)	373	77	27	26	11	13	24
Secretary of State	449	50	1	8	2	3	18
Other Designated Agency not listed above	464	1	1	1	-	-	-
Other Public Assistance Agency not listed above	235	62	88	32	12	17	14
Registration drives from advocacy groups or political parties	92	48	4	5	5	1	3
Office In Person	77	-	-	-	-	1	1
County Health/Social/Human/Family/In Home Services	40	-	-	-	-	-	-
California Health Benefit Exchange Email	15	5	8	3	4	-	3
Women, Infants, and Children (WIC)	22	-	-	-	-	-	-
Department of Public Social Services	17	-	-	-	-	-	-

Armed Forces Recruiting Centers	11	2	-	1	-	-	-
California Health Benefit Exchange Website	5	-	-	1	-	-	-
Mental Health Services	4	-	-	-	-	-	-
Voter	1	-	-	-	-	-	-
State assisted Disability Service Organizations	-	-	-	-	-	1	-
Regional Center	1	-	-	-	-	-	-

Ethnicity by registration source, VCA Counties

Registration Source by Self-Reported Ethnicity								
	Self-Reported Ethnicity							
Registration Source	**No Ethnic Information Available**	**White, not of Hispanic Origin**	**Asian or Pacific Islander**	**Hispanic**	**Black, not of Hispanic Origin**	**Multi-racial**	**Am. Indian or Alaskan Native**	**Other**
Other	452,695	7,995	2,843	2,421	864	212	96	624
Online Voter Registration	71,227	127,866	41,995	38,660	11,102	13,279	1,036	5,147
Department of Motor Vehicles	243,204	8,574	2,565	2,092	591	423	148	1,216
Other received by mail and not included above	159,385	11,164	4,500	3,798	1,611	633	195	910
National Change of Address (NCOA)	38,790	8,542	2,159	2,674	1,489	837	50	524
Other County Registrar	27,348	4,006	2,918	1,736	198	133	54	461
Secretary of State	15,581	2,402	1,058	780	83	91	22	178
Other Designated Agency not listed above	16,129	110	24	58	6	1	3	6
Other Public Assistance Agency not listed above	9,734	482	209	263	167	46	12	88
Office In Person	6,934	797	7	73	7	19	17	18
Registration drives from advocacy	6,830	467	217	187	54	14	10	54

groups or political parties								
Armed Forces Recruiting Centers	1,615	556	92	66	44	45	2	18
Failsafe Provisional Envelope	1,221	32	-	5	-	1	-	-
California Health Benefit Exchange Email	605	100	24	22	14	5	-	8
Federal Government Website (NVRA)	360	210	7	10	-	1	2	3
County Health/Social/Human/Family/In Home Services	380	26	1	7	1	2	-	-
California Health Benefit Exchange Website	249	15	3	4	-	3	2	3
Department of Public Social Services	207	4	-	9	-	-	-	-
Women Infants, and Children (WIC)	142	3	-	9	1	1	-	2
Department of Rehabilitation	128	8	5	3	4	-	1	1
Mental Health Services	125	6	1	3	1	1	2	1
Voter	90	28	-	3	1	1	-	-
Department of Motor Vehicles by Mail	95	9	-	-	-	-	1	-
State assisted Disability Service Organizations	63	2	-	1	1	-	-	-
Regional Center	11	-	-	-	-	-	-	-
Address Change Service (ACS)	6	-	-	-	-	-	-	-
California Department of Tax	-	2	1	-	-	-	-	2

and Fee Administration								
Independent Living Center	1	1	-	-	-	-	-	-
Deaf Hard of Hearing Services	1	-	-	-	-	-	-	-
Franchise Tax Board	1	-	-	-	-	-	-	-

Appendix C: Voting Methods

Age distribution by ballot return method, VCA Counties

VBM Ballot Return Method by Age						
	Age					
Return Method	18-24	25-34	35-44	45-54	55-64	65+
Mail	24,229	44,856	51,236	64,216	87,101	140,681
Drop Box	16,583	33,048	37,562	43,519	52,638	71,715
Vote Center Drop Off	16,096	30,742	34,327	36,181	37,619	36,919
Drop Off Location	703	1,363	1,651	2,205	3,831	8,170
Fax	98	169	193	181	138	159
Other	8	12	5	9	5	7

Ethnicity by ballot return method, VCA Counties

VBM Ballot Return Method by Self-reported Ethnicity								
	Self-Reported Ethnicity							
Return Method	No Ethnic Info Available	White, not of Hispanic Origin	Asian or Pacific Islander	Hispanic	Multi-racial	Black, not of Hispanic Origin	Other	Am. Indian or Alaskan Native
Mail	315,349	60,287	18,072	10,892	3,662	2,696	2,718	437
Drop Box	199,044	31,968	8,115	8,732	2,787	3,119	1,520	290
Vote Center Drop Off	143,339	26,174	6,841	8,598	2,601	3,061	1,309	251
Drop Off Location	15,043	2,056	220	262	85	147	110	20
Fax	426	360	63	22	41	10	14	2
Other	22	11	-	5	2	4	2	-

Language Preference by VBM Ballot Return Method, VCA Counties

VBM Ballot Return Method by Language Preference							
	Language						
Return Method	Spanish	Chinese	Viet-namese	Tagalog	Korean	Hindi	Other
Mail	4,153	1,945	376	221	159	77	127
Drop Box	2,008	460	168	77	50	53	42
Vote Center Drop Off	1,852	380	87	49	29	47	40
Drop Off Location	197	28	43	4	2	7	5
Fax	1	-	-	-	-	-	-
Other	1	-	-	-	-	-	-

Political Party by VBM Ballot Return Method VCA Counties

VBM Ballot Return Method by Political Party					
	Political Party				
Return Method	Democratic	Republican	No Party Preference	Other	American Independent
Mail	193,301	105,998	92,843	11,074	10,897
Drop Box	119,196	66,890	57,265	5,749	6,475
Vote Center Drop Off	90,091	46,804	45,818	4,679	4,782
Drop Off Location	8,057	5,687	2,466	1,294	439
Fax	658	57	181	36	6
Other	34	2	7	1	2

Voting Method by Age, Primary vs. General, VCA Counties

Primary vs. General Voting Method by Age							
		Age					
Election	Vote Method	18-24	25-34	35-44	45-54	55-64	65+
Primary	Vote By Mail	91.28%	90.76%	91.92%	92.29%	93.89%	96.46%
	Vote Center	7.97%	8.25%	7.55%	7.33%	5.79%	3.39%
	CVR	0.75%	0.99%	0.53%	0.38%	0.31%	0.15%
General	Vote By Mail	85.50%	86.67%	88.80%	90.22%	92.43%	95.72%

Vote Center	10.67%	10.93%	9.87%	8.95%	6.96%	3.95%
CVR	3.83%	2.41%	1.32%	0.83%	0.61%	0.33%

Provisional Ballot Type, Primary vs. General, VCA Counties vs. Statewide

Primary vs. General Provisional Ballots			
	Region	Provisional	CVR
Primary	Total VCA	4.31%	95.69%
	Statewide	96.37%	3.63%
General	Total VCA	1.99%	98.01%
	Statewide	94.43%	5.57%

CVR Acceptance Rates, Primary vs. General, VCA Counties

CVR Acceptance Rates		
	% Accepted Primary	% Accepted General
Madera	98.80%	99.51%
Napa	95.87%	96.90%
Nevada	89.01%	90.46%
Sacramento	97.15%	99.98%
San Mateo	98.41%	98.84%
Total VCA	96.61%	99.06%

Appendix D: Vote Center and Drop Box Returns

Drop Box Daily Returns						
	Nevada	Sacramento	San Mateo	Madera	Total	% Total Ballots
9-Oct	-	2	-	-	2	0.00%
10-Oct	-	-	-	-	-	0.00%
11-Oct	3	178	-	13	194	0.07%
12-Oct	32	461	-	77	570	0.22%
13-Oct	-	-	-	-	-	0.00%
14-Oct	-	-	-	-	-	0.00%
15-Oct	480	2,729	-	31	3,240	1.23%
16-Oct	662	1,957	-	131	2,750	1.04%
17-Oct	38	3,372	-	8	3,418	1.30%
18-Oct	1,221	2,566	48	48	3,883	1.47%
19-Oct	1,335	3,392	119	132	4,978	1.89%
20-Oct	-	-	35	-	35	0.01%
21-Oct	-	-	-	-	-	0.00%
22-Oct	2,527	4,198	283	73	7,081	2.69%
23-Oct	1,097	4,126	228	67	5,518	2.09%
24-Oct	3,763	4,336	632	414	9,145	3.47%
25-Oct	1,860	6,529	501	78	8,968	3.40%
26-Oct	1,124	4,970	273	149	6,516	2.47%
27-Oct	817	2,952	86	197	4,052	1.54%
28-Oct	305	-	-	71	376	0.14%
29-Oct	2,302	5,560	1,526	159	9,547	3.62%
30-Oct	1,731	5,398	797	282	8,208	3.11%
31-Oct	3,195	7,925	615	270	12,005	4.55%
1-Nov	1,202	5,242	1,404	255	8,103	3.07%
2-Nov	2,439	10,202	1,126	342	14,109	5.35%
3-Nov	2,142	6,808	265	315	9,530	3.61%
4-Nov	452	5,948	556	310	7,266	2.76%
5-Nov	3,969	9,098	3,946	1,151	18,164	6.89%
6-Nov	9,963	89,433	12,298	2,192	113,886	43.18%
7-Nov	1,324	-	-	-	1,324	0.50%
8-Nov	651	-	-	-	651	0.25%
9-Nov	198	-	-	-	198	0.08%

	Nevada	Sacramento	San Mateo	Madera	% Total Ballots
			Vote Center Daily Returns		
9-Oct	7	-	48	-	**0.07%**
10-Oct	2	-	36	-	**0.05%**
11-Oct	5	-	43	-	**0.06%**
12-Oct	5	-	62	-	**0.09%**
13-Oct	-	-	-	-	**0.00%**
14-Oct	-	-	-	-	**0.00%**
15-Oct	274	-	73	-	**0.45%**
16-Oct	38	-	66	-	**0.13%**
17-Oct	30	-	79	-	**0.14%**
18-Oct	14	-	57	-	**0.09%**
19-Oct	152	-	43	-	**0.25%**
20-Oct	-	-	-	-	**0.00%**
21-Oct	-	-	-	-	**0.00%**
22-Oct	539	-	61	-	**0.77%**
23-Oct	490	-	45	-	**0.69%**
24-Oct	31	-	41	-	**0.09%**
25-Oct	67	-	49	-	**0.15%**
26-Oct	439	-	61	-	**0.64%**
27-Oct	148	109	123	15	**0.51%**
28-Oct	8	32	90	6	**0.17%**
29-Oct	33	100	111	20	**0.34%**
30-Oct	114	115	121	29	**0.49%**
31-Oct	91	102	118	27	**0.43%**
1-Nov	44	128	171	36	**0.49%**
2-Nov	95	236	99	41	**0.60%**
3-Nov	32	750	916	57	**2.25%**
4-Nov	17	754	1,027	62	**2.39%**
5-Nov	331	2,075	1,923	207	**5.82%**
6-Nov	4,339	33,121	23,952	3,163	**82.85%**

Appendix E: PDI Ethnicity Data

PDI Ethnicity Data

The supplemental data provided by PDI contained the records of fewer active registered voters than VoteCal. PDI's voter file contained 1,300,334 active registrants compared to the 1,380,981 active registrants that were in VoteCal. Although CEIR was unable to independently verify the accuracy of PDI's data or the methodology used to create it, the following table is included in an effort to better understand the VCA's impact on various ethnic groups.

Among the VCA county voters in PDI's voter file, those in the insufficient ethnicity data group made up nearly 45 percent of registered voters. The white ethnic group was the largest non-generic group with just over 20 percent of registered voters.

PDI's Estimated Ethnicity of Registered Voters (by County)						
	County					
Estimated Ethnicity	Madera	Napa	Nevada	Sacramento	San Mateo	Total
Insufficient Ethnicity Data	24,211 (44.19%)	36,951 (49.14%)	43,286 (64.35%)	352,341 (48.41%)	123,427 (32.89%)	580,216 (44.62%)
White	9,159 (16.72%)	18,452 (24.54%)	17,533 (26.06%)	170,356 (23.41%)	99,901 (26.62%)	315,401 (24.26%)
White (nonspecific)	7,528 (13.74%)	15,450 (20.55%)	15,141 (22.51%)	147,066 (20.21%)	79,365 (21.15%)	264,550 (20.34%)
Armenian	129 (0.24%)	70 (0.09%)	72 (0.11%)	1,478 (0.20%)	1,012 (0.27%)	2,761 (0.21%)
Persian	9 (0.02%)	70 (0.09%)	24 (0.04%)	1,443 (0.20%)	1,562 (0.42%)	3,108 (0.24%)
Greek	22 (0.04%)	129 (0.17%)	85 (0.13%)	880 (0.12%)	1,288 (0.34%)	2,404 (0.18%)
Italian	905 (1.65%)	2,216 (2.95%)	1,796 (2.67%)	12,754 (1.75%)	13,613 (3.63%)	31,284 (2.41%)
Arabic (Incomplete)	15 (0.03%)	46 (0.06%)	14 (0.02%)	461 (0.06%)	390 (0.10%)	926 (0.07%)
Portuguese	549 (1.00%)	448 (0.60%)	365 (0.54%)	4,050 (0.56%)	1,997 (0.53%)	7,409 (0.57%)
Russian/Soviet (Incomplete)	2 (0.00%)	23 (0.03%)	36 (0.05%)	2,224 (0.31%)	674 (0.18%)	2,959 (0.23%)
Asian/Pacific Islander	1,205 (2.20%)	3,482 (4.63%)	713 (1.06%)	78,896 (10.84%)	74,899 (19.96%)	159,195 (12.24%)
Chinese	106 (0.19%)	345 (0.46%)	188 (0.28%)	13,050 (1.79%)	26,602 (7.09%)	40,291 (3.10%)
Pacific Islander (Incomplete)	4 (0.01%)	18 (0.02%)	5 (0.01%)	1,264 (0.17%)	1,516 (0.40%)	2,807 (0.22%)

East Indian	513 (0.94%)	364 (0.48%)	61 (0.09%)	14,790 (2.03%)	6,786 (1.81%)	22,514 (1.73%)
Filipino	307 (0.56%)	1,992 (2.65%)	116 (0.17%)	15,363 (2.11%)	24,334 (6.48%)	42,112 (3.24%)
Korean	34 (0.06%)	132 (0.18%)	51 (0.08%)	2,534 (0.35%)	2,408 (0.64%)	5,159 (0.40%)
Southeast Asian (Cambodian/Thai/Hmong)	50 (0.09%)	19 (0.03%)	16 (0.02%)	8,022 (1.10%)	506 (0.13%)	8,613 (0.66%)
Japanese	117 (0.21%)	254 (0.34%)	203 (0.30%)	6,591 (0.91%)	4,220 (1.12%)	11,385 (0.88%)
Chinese/Korean/Vietnamese	7 (0.01%)	27 (0.04%)	8 (0.01%)	563 (0.08%)	1,027 (0.27%)	1,632 (0.13%)
Vietnamese	39 (0.07%)	203 (0.27%)	27 (0.04%)	13,213 (1.82%)	3,184 (0.85%)	16,666 (1.28%)
Chinese/Korean	22 (0.04%)	82 (0.11%)	22 (0.03%)	2,280 (0.31%)	2,762 (0.74%)	5,168 (0.40%)
Chinese/Vietnamese	6 (0.01%)	46 (0.06%)	16 (0.02%)	1,226 (0.17%)	1,554 (0.41%)	2,848 (0.22%)
Latino (Hispanic/Spanish)	**19,159 (34.97%)**	**13,823 (18.38%)**	**3,002 (4.46%)**	**104,235 (14.32%)**	**57,519 (15.33%)**	**197,738 (15.21%)**
Multiracial	**313 (0.57%)**	**474 (0.63%)**	**412 (0.61%)**	**7,135 (0.98%)**	**5,470 (1.46%)**	**13,804 (1.06%)**
Asian/Anglo	129 (0.24%)	186 (0.25%)	183 (0.27%)	3,553 (0.49%)	3,487 (0.93%)	7,538 (0.58%)
Mixed	184 (0.34%)	288 (0.38%)	229 (0.34%)	3,582 (0.49%)	1,983 (0.53%)	6,266 (0.48%)
Other	**744 (1.36%)**	**2,015 (2.68%)**	**2,322 (3.45%)**	**14,863 (2.04%)**	**14,036 (3.74%**	**33,980 (2.61%)**
Jewish	436 (0.80%)	1,331 (1.77%)	1,463 (2.17%)	9,043 (1.24%)	9,819 (2.62%)	22,092 (1.70%)
Jewish 2	302 (0.55%)	669 (0.89%)	851 (1.27%)	5,297 (0.73%)	3,493 (0.93%)	10,612 (0.82%)
T	6 (0.01%)	15 (0.02%)	8 (0.01%)	523 (0.07%)	724 (0.19%)	1,276 (0.10%)
Total	**54,791**	**75,197**	**67,268**	**727,826**	**375,252**	**1,300,334**

Turnout by PDI's "Likely African American" (VCA Counties)			
Estimated Ethnicity	Registered (Likely Af. Am.)	Ballots Cast	% Turnout
Generic	22,541	14,529	64.46%
White	7,989	5,478	68.57%
Asian/Anglo	263	160	60.84%
Jewish 2*** (Incomplete)	148	103	69.59%
Total Likely Af. Am. Voters	**30,941**	**20,270**	**65.51%**

Turnout by PDI's Estimated Ethnicity (VCA Counties)			
Estimated Ethnicity	Ballots Cast	Registered	% Turnout
Insufficient Ethnicity Info	**433,636**	**580,216**	**74.74%**
White	**227,165**	**315,401**	**72.02%**
White	189,595	264,550	71.67%
Armenian	1,675	2,761	60.67%
Persian	2,072	3,108	66.67%
Greek	1,833	2,404	76.25%
Italian	24,501	31,284	78.32%
Arabic	541	926	58.42%
Portuguese	5,356	7,409	72.29%
Russian/Soviet (Incomplete)	1,592	2,959	53.80%
Asian/Pacific Islander	**99,260**	**159,195**	**62.35%**
Chinese	26,911	40,291	66.79%
Pacific Islander (Incomplete)	1,479	2,807	52.69%
East Indian	13,972	22,514	62.06%
Filipino	26,435	42,112	62.77%
Korean	3,171	5,159	61.47%
Southeast Asian (Cambodian/Thai/Hmong)	3,387	8,613	39.32%
Japanese	8,832	11,385	77.58%
Chinese/Korean/Vietnamese	1,019	1,632	62.44%
Vietnamese	9,114	16,666	54.69%
Chinese/Korean	3,177	5,168	61.47%
Chinese/Vietnamese	1,763	2,848	61.90%
Latino (Hispanic/Spanish)	**119,865**	**197,738**	**60.62%**
Multiracial	**9,290**	**13,804**	**67.30%**
Asian/Anglo	5,215	7,538	69.18%
Mixed	4,075	6,266	65.03%

Other		27,098	33,980	79.75%
	Jewish	17,764	22,092	80.41%
	Jewish 2*** (Incomplete)	8,478	10,612	79.89%
	T	856	1,276	67.08%
Total		916,314	1,300,334	70.47%

Turnout by PDI's "Likely African American" (VCA Counties)			
Estimated Ethnicity	Registered (Likely Af. Am.)	Ballots Cast	% Turnout
Generic	22,541	14,529	64.46%
White	7,989	5,478	68.57%
Asian/Anglo	263	160	60.84%
Jewish 2*** (Incomplete)	148	103	69.59%
Total Likely Af. Am. Voters	30,941	20,270	65.51%