New Electorate Study:  
How Did the Voter’s Choice Act Affect Turnout in 2018?

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Research Questions
In its first year of implementation, did the Voter’s Choice Act (VCA) change turnout patterns in the counties – Madera, Napa, Nevada, Sacramento, and San Mateo – that adopted this new reform? How did this reform affect the turnout of groups of Californians – young voters, Latinos, and Asian Americans – who have often participated in elections at lower rates than others? We address these questions by gathering data on turnout rates, voter demographics, and electoral competition from 2002 through the primary and general elections of 2018, comparing trends in the adopting counties to the rest of the state.

Summary of Findings
1. Looking at the turnout of all eligible voters, the VCA appeared to bring an increase in turnout of approximately three percentage points in the 2018 general election as well as a boost of about four percentage points in the primary. The five counties that implemented the VCA saw their turnout rise more steeply than the participation increase seen in other counties from 2014 to 2018, with this straightforward comparison yielding the same findings as a statistical analysis that considers historical trends since 2002 as well as the level of electoral competition in each county.

2. For young voters, Latinos, and Asian Americans, gains in turnout were generally also steeper in the counties that adopted the VCA than in counties that did not. We estimate that the reform boosted turnout by up to seven percentage points, depending on the group and whether we look at the primary or general election. However, we often have less confidence that these findings are due to the reform rather than to chance alone, because turnout rates vary more widely from county to county for voters in these subgroups than for voters overall.

Background on the Voter’s Choice Act
In 2016, Governor Jerry Brown signed Senate Bill 450, which allows California counties to choose to adopt a new voting model. Known as the Voter’s Choice Act (VCA), this law directs participating counties to mail every registered voter a vote-by-mail ballot which the voter can mail in, drop off at a secure ballot box, or drop off at a newly established Vote Center. The VCA also provided more services to voters using the new Vote Centers. At a Vote Center, voters can now cast their ballots in person, drop off their VBM ballots, register to vote as late as election day through “conditional” voter registration, receive replacement ballots, use an accessible voting machine, and receive language assistance. Voters may vote at any Vote Center in their county up to ten days before Election Day.

The new voting system is designed to make the voting process more convenient for voters in California, while at the same time potentially increasing voter turnout and reducing the cost of conducting elections. Of California’s 58 counties, 14 were eligible to opt in during the 2018 election. Five did: Madera, Napa, Nevada, Sacramento and San Mateo Counties. All other California counties are currently eligible to adopt the model in 2020, with the exception that Los Angeles County is not required to mail all of its registered voters VBM ballots until 2024. Los Angeles County, along with the counties of Fresno, Mariposa, Orange and Santa Clara have chosen (as of publication) to adopt the VCA for the 2020 election cycle. In total, ten California counties will be conducting elections under the Voter’s Choice Act in 2020.
Research Approach

To analyze the impact of the VCA on participation rates, we compare trends in voter turnout in the adopting counties to trends in the rest of California. We track whether their voter participation rates moved in parallel to the statewide pattern in 2018 or whether they diverged. This allows us to determine what level of turnout we might have expected in these counties if they had not implemented the new set of voting options in 2018. We also gather data on the average competitiveness of legislative contests in each county in order to account for the potential impact of tightly contested races on turnout. Our approach allows us to address three obstacles to evaluating the impact of the VCA on voter participation:

- **Long-term turnout patterns.** On average, the counties that adopted the VCA in 2018 have had higher turnout rates than the rest of the state. Their average turnout was also higher in the 2014 midterm election, which was held before the passage of the VCA. We would expect them to maintain these higher levels of turnout even if they did not implement the VCA. Consequently, an analysis that simply compares 2018 turnout in the VCA-adopting counties to turnout in counties without the VCA would not reveal its impact; their turnout should be higher on average after the VCA because they consistently had higher participation rates even before the reform.

- **Higher 2018 turnout everywhere.** The 2018 primary and general elections saw historically high levels of voter engagement, especially compared with the historically low turnout in 2014. With turnout of 50.5% of eligible voters, the November 2018 election had the highest participation of any midterm election since 1982. With turnout of 30.9% of eligible voters, the November 2014 election had the lowest participation rate of any midterm at least since 1910. Regardless of the voting system, we'd expect every county in California to see a rise in turnout from 2014 to 2018. Simply comparing participation in those two elections for a county that adopted the VCA does not reveal the reform’s impact. Instead, we need to compare a county’s rise in participation to the overall state trend.

- **Other campaign and election dynamics.** In any given election, especially competitive races held in the legislative and congressional districts contested in a county can lead to a spike in turnout there. Also, counties that tend to vote for Democratic Party candidates saw especially strong spikes in turnout in 2018. With only one year of experience to evaluate the VCA, it is important to account for such spikes, isolating the impact of the voting reform from patterns in electoral competition and from partisan turnout trends. We measure and use statistical models to control for the competitiveness of Assembly, state Senate, and congressional races in each county, in order to rule out the possibility that any differential trends we observe are a function of where the state’s most contested districts were located. We also use statistical models that control for partisan voting trends across counties, measured by their 2016 presidential vote, in order to rule out the possibility that a turnout surge in Democratic-leaning counties accounts for any of the patterns we observe.

Section 1. How Did the VCA Affect Turnout of All Eligible Voters?

A. Turnout in the November 2018 General Election

We begin our analysis of the initial impact of the VCA on voter participation by looking at turnout trends in the five adopting counties and comparing them with the patterns in other counties. This approach accounts for both the consistently high turnout rates achieved by these counties over the past two decades, as well as for the sharp increase in voter participation in 2018.

We focus on the turnout of eligible voters for two reasons. First, this provides the most complete measure of the effect of the reforms on the entire potential electorate. Second, it better captures the two possible impacts of the VCA: making it more (or potentially less) convenient to cast a ballot for those who are already registered, and making conditional registration a more (or less) streamlined process for those who are not. Analyzing the registered population instead of the eligible population as the baseline would capture the first effect, but it would not capture any changes in registration that emerge from the second.

Table 1 simply compares the rise in turnout from 2014 to 2018 in the VCA counties to the average rise in other counties. For both sets of counties, we take the average of the turnout rates in each county, giving each the same weight regardless of the size of its electorate. This approach views every California county as equally informative about the impact of voting methods on turnout, rather than giving dominant weight to data from the largest counties in each group. This is a sensible approach when trying to understand the effect of the reform, but it means our composite of the rest of the state will often differ from reported
statistics. Figure 1 extends our approach by providing turnout data in every midterm election since 2002, ensuring that none of the adopting counties deviated from the state trend in an anomalous way in 2014. Finally, we conclude our discussion by summarizing the results of multivariate statistical models that allow us to control for the level of electoral competition in each county in each year, and to hold constant the year-to-year turnout trends and the different baseline levels of turnout that are typically seen in each county.

As Table 1 shows, the increase in turnout from the November, 2014 election to November, 2018 was steeper in nearly all of the counties that adopted the VCA, compared with the trend in other parts of the state. The average rise in turnout was 18 percentage points in adopting counties, compared with 15 percentage points elsewhere. This straightforward approach yields an estimated increase in turnout due to the VCA of three percentage points in the general election. Looking back further in time through Figure 1 and estimating a statistical model reveal very similar trends, increasing our confidence about the VCA’s initial positive impact on overall turnout.

Table 1. General Election Turnout of Eligible Voters

<table>
<thead>
<tr>
<th>Counties Adopting the VCA</th>
<th>Increase in General Election Turnout, 2014 to 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Increase in Counties Adopting the VCA</td>
<td>18.0</td>
</tr>
<tr>
<td>Average Increase in All Other Counties</td>
<td>15.0</td>
</tr>
<tr>
<td>Madera</td>
<td>11.6</td>
</tr>
<tr>
<td>Napa</td>
<td>19.5</td>
</tr>
<tr>
<td>Nevada</td>
<td>18.3</td>
</tr>
<tr>
<td>Sacramento</td>
<td>17.2</td>
</tr>
<tr>
<td>San Mateo</td>
<td>23.6</td>
</tr>
</tbody>
</table>

Figure 1 traces each adopting county’s trend over time (in red) against the average from all other counties (in gray). A dashed line shows the timing of the VCA’s implementation. Each of the graphs shows that the adopting counties typically followed statewide trends in turnout during midterm elections, experiencing the same historic downturn in turnout during 2014. Across the state, turnout rebounded sharply in 2018. Yet turnout rose more sharply still in four of the five counties adopting the VCA, confirmatory evidence of its positive impact on turnout.

Finally, we estimated a “differences-in-differences” statistical model predicting turnout in every county in each of the past eight midterm elections (going back to 1990). We included year “fixed effects” to capture statewide turnout trends in each election, and county “fixed effects” to capture the consistent difference in baseline turnout levels across counties. The estimated impact of VCA adoption in this model closely mirrors our estimate from the straightforward comparison made in Table 1. The statistical model estimates that VCA adoption increased the turnout of eligible voters by 3.5 percentage points, with 97% confidence of at least some effect. We also ran two additional statistical models, one that controls for the level of electoral competition in each county in each year, and another that controls for the percentage of voters in each county who supported the Democrat (Hillary Clinton) in the 2016 presidential race. These models allow us to consider the alternative explanation that any effect we observe for the VCA is due to especially competitive races held in the adopting counties in 2018, or particularly high spikes in turnout in those counties in that year driven by partisan trends. In both analyses, we still find a significant and positive impact of the reform. Controlling for the level of competition, VCA adoption increased the turnout of eligible voters by 3.2 percentage points, with 96% confidence of at least some effect. Controlling for partisan voting trends in each county, VCA adoption appeared to increase turnout by 2.4 percentage points, with 88% confidence of at least some effect.
B. Turnout in the Primary

Just as we did in our analysis of general election turnout, we analyze the impact of the VCA in the primary election by comparing the rise in turnout from 2014 to 2018 in the VCA counties to the average rise in other counties. We summarize this analysis in Table 2. Again, we see that turnout rose more sharply in nearly every VCA county than it did, on average, in the 53 counties that did not adopt the reform. In the counties that did not adopt, participation in the primary election rose an average of 6.8 percentage points between 2014 and 2018. In the five counties that did adopt the VCA, the increase in turnout in these years was steeper: 10.3 percentage points. Comparing these two increases, we estimate an increase in turnout due to the VCA of 3.5 percentage points in the primary election.

Again, looking at the longer time trends displayed in Figure 2 and using a statistical model yield similar conclusions, increasing our confidence that the reform brought its intended increase in overall turnout. Figure 2 traces each adopting county’s trend over time (in red) against the average primary from all other counties (in gray). Before the implementation of the VCA (indicated by a dashed line), turnout in these counties generally rose and fell with the statewide average. From 2014 to 2018, the rise in turnout in four of the five adopting counties was steeper than the rise in the state overall, indicating the reform’s positive effect on turnout. These findings are confirmed by our “difference-in-differences” statistical model. This model estimates that VCA adoption increased the turnout of eligible voters in the primary by 4.2 percentage points, with 99% confidence of at least some effect. When we added control variables to this model in order to rule out alternative explanations, we continued to see strongly significant effects of the reform. Controlling for the level of electoral competition in each county, VCA adoption increased the turnout of eligible voters by 4.4 percentage points, with 99% confidence of at least some effect. Controlling for partisan voting trends, adoption of the VCA increased turnout by an estimated 3.4 percentage points, with 97% confidence of at least some effect.

Table 2. Primary Election Turnout of Eligible Voters

<table>
<thead>
<tr>
<th>Counties Adopting the VCA</th>
<th>Increase in Primary Election Turnout, 2014 to 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average of Counties Adopting the VCA</td>
<td>10.3</td>
</tr>
<tr>
<td>Average of All Other Counties</td>
<td>6.8</td>
</tr>
</tbody>
</table>

Counties Adopting the VCA

- Madera: 4.6
- Napa: 9.7
- Nevada: 13.5
- Sacramento: 9.5
- San Mateo: 14.0

Estimated Boost in Turnout: 3.5 percentage points
Section 2. How Did the VCA Affect Turnout of Young, Latino, and Asian-American Voters?

An important question about the impact of the VCA on the representativeness of California elections is whether the increase that it appears to have brought to voter turnout overall was shared by all types of voters, especially those who have traditionally participated at lower rates. In this section, we focus on three groups that have often seen less representation in California’s electorate than in its population of eligible voters: young voters (aged 18-24), Latinos, and Asian-American voters. We find that turnout for voters in these groups generally rose more sharply from 2014 to 2018 in counties adopting the VCA than it did in other counties, following similar patterns to the trend for voters overall.

All of our analyses look at the estimated turnout of eligible voters in these groups, the most comprehensive measure of voter participation. To calculate these estimates, we begin with figures on the number of eligible voters in each group in each county during each year, provided to us by the California Department of Finance Demographic Unit. That provides our denominator. Our numerator comes from data from the California Statewide Database in 2010, 2014, and the 2018 primary election. Because data from this source are not yet available for the 2018 general election, we use figures from Political Data, Incorporated for that election. Young voters are identified in each year through the self-reported birth dates, with voters aged between 18 and 24 years considered young. Latino and Asian-American voters are estimated through their surnames (in the data taken from the Statewide Database) and from their surnames, birthplaces, and the demographic characteristics of the areas in which they live (in the 2018 general election data from Political Data, Incorporated). We use these figures to calculate participation rates for each group in each county in each election, and then average across both adopting and non-adopting counties, just as in our analysis of voters overall. Because some of these groups are so small in some counties, we omit data from counties with fewer than 100 eligible voters in a group in 2014 or with missing data in any election, dropping one county from our analysis of young voters, four counties from our analysis of Latino voters, and five counties from our analysis of Asian-American voters.

In Tables 3, 4, and 5, we compare turnout increases between 2014 and 2018 for the five counties that adopted the VCA to the rises in other counties. The difference between these increases yields our estimate of the impact of the reform’s adoption. For young voters, the rise in turnout in the 2018 General Election was especially steep in the counties that adopted the VCA, outpacing other counties by 6.8 percentage points. The increase in primary turnout was also steeper, surpassing the increase in non-adopting counties by 2.6 percentage points. Figure 3 shows that this accelerated rise in turnout occurred in nearly every
adopting county. In our statistical models, we estimate that VCA adoption increased the turnout of eligible voters aged 18-24 in the general election by 6.2 percentage points, with 99% confidence of at least some effect. In the primary election, we estimate an increase in youth turnout of 3.0 percentage points, with 71% confidence of at least some effect.

Table 3. Turnout of Young Voters

<table>
<thead>
<tr>
<th></th>
<th>Increase in General Election Turnout, 2014 to 2018</th>
<th>Increase in Primary Election Turnout, 2014 to 2018</th>
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<tbody>
<tr>
<td>Average Increase in Counties Adopting the VCA</td>
<td>17.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Average Increase in All Other Counties</td>
<td>10.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Estimated Boost in Turnout</td>
<td>6.8</td>
<td>2.6</td>
</tr>
</tbody>
</table>

Figure 3. Primary Election Turnout of Eligible Voters Aged 18-24 in Midterms, 2010-2018

For Latino voters, the rise in turnout in the 2018 General Election was steeper in the counties that adopted the VCA than in other counties, outpacing that rise by 3.8 percentage points. The increase in primary turnout was marginally steeper, surpassing the increase in non-adopting counties by 2.3 percentage points. Figure 4 shows that this accelerated rise in turnout occurred in four of the five adopting counties. In our statistical models, we estimate that VCA adoption increased the turnout of Latino eligible voters in the general election by 2.5 percentage points, with 83% confidence of at least some effect. In the primary election, we estimate an increase in Latino turnout of 2.5 percentage points, with 94% confidence of at least some effect.
Table 4. Turnout of Latino Voters

<table>
<thead>
<tr>
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<th>Increase in General Election Turnout, 2014 to 2018</th>
<th>Increase in Primary Election Turnout, 2014 to 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Increase in Counties Adopting the VCA</td>
<td>16.1</td>
<td>7.2</td>
</tr>
<tr>
<td>Average Increase in All Other Counties</td>
<td>12.3</td>
<td>4.9</td>
</tr>
<tr>
<td>Estimated Boost in Turnout</td>
<td>3.8</td>
<td>2.3</td>
</tr>
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</table>

Figure 4. Primary Election Turnout of Eligible Latino Voters in Midterms, 2010-2018

Finally, for Asian-American voters, we find a positive but, in the primary election, weaker impact of the adoption of the VCA. The rise in turnout in the 2018 General Election was steeper in the counties that adopted the VCA than in other counties, outpacing that rise by 4.0 percentage points. But the effect for primary turnout was much weaker, exceeding the average of other counties by only 0.5 percentage points. Figure 5 shows that three of the five counties saw a disproportionate turnout increase in the primary, while one actually saw a turnout decline. In our statistical models, we estimate that VCA adoption increased the turnout of Asian-American eligible voters in the general election by 4.6 percentage points, with 66% confidence of at least some effect. In the primary election, we estimate an increase in Asian-American turnout of 1.4 percentage points, with 38% confidence of at least some effect.

With all of our analyses of small groups of voters, one year of implementation of the VCA can yield only preliminary lessons about its effects on turnout. Our statistical models indicate less confidence in estimates of the impact of VCA adoption on Latino and Asian-American voters because these turnout rates vary significantly across counties and across years. The concentrations of young, Latino, and Asian-American voters vary across the counties, and differ between the five counties that adopted it in 2018 and the rest of the state. All of these factors suggest that more experience with the implementation of the VCA is necessary in order to draw firm conclusions about its effect on voters in each of these groups.
### Table 5. Turnout of Asian-American Voters

<table>
<thead>
<tr>
<th></th>
<th>Increase in General Election Turnout, 2014 to 2018</th>
<th>Increase in Primary Election Turnout, 2014 to 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Increase in Counties Adopting the VCA</td>
<td>11.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Average Increase in All Other Counties</td>
<td>7.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Estimated Boost in Turnout</td>
<td>4.0</td>
<td>0.5</td>
</tr>
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</table>

### Figure 5. Primary Election Turnout of Eligible Asian-American Voters in Midterms, 2010-2018

**Conclusion**

In order to evaluate the impact of the VCA on participation in the 2018 elections, it is important to make careful comparisons. Because the five counties that adopted it had high turnout even before 2018, simply comparing their participation rates to those of other counties does not isolate the impact of the reform. Because turnout in 2018 was so much stronger all across California than it was in 2014, simply looking at the increase in turnout in the VCA counties from one midterm election to the next does not tell the full story, either. Instead, our analysis compares the increase in turnout from 2014 to 2018 in the VCA counties, compared with the average turnout increase in all other counties, in order to determine whether the reform in fact boosted participation.

We find that the VCA’s adoption in 2018 led to modest yet significant increases in turnout by eligible voters of approximately three percentage points in the primary and general elections. Importantly, the rise in turnout among voters overall appears to be present as well in most of the groups we looked at that have had low levels of representation in California’s electorate. For young voters, Latinos, and to a lesser extent Asian-Americans, turnout also rose faster in the counties that adopted the VCA.
**ABOUT THE STUDY**

This research study continues beyond the publication of this brief. We will further explore possible factors that could help explain the findings of a turnout increase in VCA counties. The next phase of our research will be submitted for publication in late Spring of 2019.

**NOTES**

1. For more information on the Voter’s Choice Act (California Senate Bill 450), see: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB450


3. An alternative approach would be to weight the importance of each county in our analysis, proportional to the size of that county’s electorate. In this approach, turnout trends in Sacramento County (by far the largest of the counties that adopted the VCA) would account for much of the estimated turnout trend for adopting counties, while the trend for other counties would closely follow patterns in Los Angeles, San Diego, and Orange Counties. When we take this approach in our statistical models – weighting data from each county by the square root of the size of its eligible electorate— we estimate smaller positive impacts on turnout. In the general election, we estimate a 1.2% increase in turnout due to the implementation of the VCA (with 71% confidence of at least some effect), rather than a 3.5% increase. In the primary, we estimate a 2.0% increase in turnout due to the implementation of the VCA (with 92% confidence of at least some effect), rather than a 4.2% increase.

4. General election turnout in the counties that adopted the VCA averaged 38.74% in 2014 and rose to 56.78% in 2018, an increase of 18 percentage points. In the counties that did not adopt the VCA, the average turnout rate of all eligible voters was 37.0% in 2014 and then rose to 52.0% in 2018, an increase of 15 percentage points. Comparing these increases gives us an estimated boost in turnout due to the implementation of the VCA of three percentage points. Note that this is a three percentage point increase in the portion of the eligible voter population that participated, rather than a percent of the turnout rate in 2014.

5. While we would prefer a consistent source for the 2018 general election, we have extensively analyzed whether Political Data, Incorporated and the Statewide Database report similar figures for the 2018 primary election, for which both have available data. Turnout rates for each subgroup of voters in each county are nearly perfectly correlated across the two sources for young voters and for Latinos, and are solidly correlated for Asian-American voters. Data from the Statewide Database and Political Data, Inc. is derived from county voter registration records rather than from a sample if voters. Because of this, figures calculated from these sources are not susceptible to sampling error in the way that surveys and exit poll results are. The Statewide Database distinguishes Latinos and Asian Americans in the registration data from the general population by the use of Spanish and Asian surname lists which identify registrants with commonly occurring Spanish and Asian surnames. The Passel-Word Spanish surname list, published by the US Census Bureau, was utilized to identify Latinos. For Asian Americans, the US Census Bureau’s surname lists for six major Asian-American ethnic groups were utilized: Chinese, Japanese, Filipino, Korean, Asian Indian, and Vietnamese. Surname matching for Latinos is a commonly utilized methodology. However, confidence levels for Asian American groups can generally be lower as it has often been found to be more difficult to achieve accurate identification of Asian surnames. Surname matching is not reliable for white, non-Hispanic, and African-American populations, and thus registration data is not available for these groups. For more information on methodology and limitations, please see: http://swdb.berkeley.edu/d10/Creating%20CA%20Off%20Redistricting%20Database.pdf
About the New Electorate Project. This project aims to provide rigorous evidence to evaluate how recent voting reforms in California are reshaping the state’s electorate. In a series of studies, we ask how these reforms – including the Voter’s Choice Act, shifts in the timing of local elections, and changes in voter registration – impact both overall turnout rates and the extent to which California’s new electorate reflects and represents emerging demographic trends. We are conducting original academic research, but also summarizing our findings in research briefs tailored to policymakers, advocates, journalists, and interested members of the public. Our findings will be released to the public and available at newelectorateproject.org. Funded by the University of California’s Office of the President, this project brings together faculty members, graduate students and undergraduates at five UC campuses with collaborators at USC and the PPIC, along with two former lawmakers who now teach at UC San Diego. The project leaders are:

- **UC San Diego**: Thad Kousser, Seth Hill, Denise Ducheny, Nathan Fletcher
- **UC Davis**: Ben Highton, Cheryl Boudreau
- **UC Berkeley**: Jack Citrin, Gabe Lenz
- **UC Riverside**: Jenn Merolla, Dan Biggers
- **UC Merced**: Jessica Trounstine
- **University of Southern California**: Mindy Romero
- **Public Policy Institute of California**: Eric McGhee

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