



**ORANGE COUNTY
REGISTRAR OF VOTERS**

2020 VOTER LIST MAINTENANCE REPORT

**Maintaining voter records in
Orange County, California**



**How voter
registration works.**



**Enhanced
list maintenance.**



**Metrics detailing
improvements.**

CONTENTS

EXECUTIVE SUMMARY	1
CHANGES RECENTLY IMPLEMENTED TO IMPROVE THE PROCESS	2
2000 - Voter Registration Twelve Years Ago.....	2
2006 – CalValidator Increased Communication with the Department of Motor Vehicles (DMV)	2
2007 – Real Time Processing Increased Communication with the State.....	3
2008 – More Timely National Change of Address Updates.....	3
2008 – Increased Voter Follow-Up	4
2009 – Ability to Check Voter Registration Added to Our Website (ocvote.com)	4
2010 – Website Provide Simplified Information on Voter Registration Changes	5
VOTER REGISTRATION AND LIST MAINTENANCE IN ORANGE COUNTY IN 2012	6
Registering to Vote - The First Step	6
HOW A REGISTRATION FORM IS PROCESSED	7
Step 1: The form is delivered to the Registrar of Voters’ office	7
Step 2: The form is reviewed for completeness.....	7
Step 3: The form is entered into our voter registration database	7
Step 4: The record is sent electronically to the Secretary of State’s office	7
Step 5: The voter is notified of his or her registration.....	8
Step 6: The record is proofed for accuracy	8
The Voter is Registered – What Next?.....	8
The National Change of Address (NCOA) Process	9
Department of Motor Vehicle (DMV) Changes.....	11
Undeliverable Mail	11
Voters Registered in Other Counties, Provided by the Secretary of State’s Office	12
Cancellation Requested by Voter.....	12
Updates Initiated by a Third-Party (Someone Other Than the Voter)	13
Comparison of Voter Cancellations.....	14

DECEASED VOTERS	15
OVERVIEW OF THE ENTIRE VOTER REGISTRATION PROCESS	18
Strengths of the Process as a Whole	18
CONTINUED OPERATIONAL IMPROVEMENTS IN MAINTAINING VOTER REGISTRATION DATA	21
Nationwide Data Sharing	21
Alternative Data Sources - Address Data From Credible Third-Party Data Providers	22
APPENDIX A: 2020 UPDATE	30
Success of Using a Third-Party Data Provider	30
Collaboration with Caltech	31
Conversion to a Statewide Voter registration Database	32
Involvement in Developing Standards	34
Shift to Online Registration	34
DMV Registrations.....	35
Continual Voter Registration Updates	36
Evidence of Accuracy	39
APPENDIX B	41
Cost Comparison Charts	42

EXECUTIVE SUMMARY

Effective maintenance of the voter registration database is crucial to enabling voter participation and maintaining election security. An accurate voter registration database allows eligible voters the ability to more easily participate and receive correct election materials. An accurate database also increases security by reducing the ability of ineligible voters from participating. As the fifth largest voting jurisdiction in the nation, Orange County views it as our responsibility to be leaders in the area of maintaining an accurate voter registration database. As a result, we have sought methods to continually improve this process, and have developed measures to track the efficacy of our efforts.

In 2012, we released a report describing the voter registration process in detail, and our efforts to find ways to improve the process and accuracy of the voter registration database. Now, in 2020, we have provided an update to the report which includes recent changes to the voter registration process, additional processes that have been added to improve the accuracy of the database, and measurements demonstrating the results of our efforts.



Neal Kelley
Registrar of Voters

CHANGES RECENTLY IMPLEMENTED TO IMPROVE THE PROCESS

The process of maintaining our voter registration list has changed drastically, and many of the changes have been implemented in the last six years (since 2006). Each change, either implemented through an improvement in process or through the use of technology, has increased our ability to maintain an accurate voter list.

2000 - Voter Registration Twelve Years Ago

In 2000, most of the responsibility was on the Voter to inform our office of a change to his or her registration. If, for example, John Q. Voter moved within Orange County, he would need to update his voter registration by submitting a new registration form to our office. If he moved to another county and re-registered in that county, our office relied on the other county to send us a printed copy of the voter's new information. If Mr. Voter submitted a Change of Address form to the Post Office, we may have been notified of his new address when our office checked the National Change of Address (NCOA) database (maintained by the U.S. Postal Service), which was only conducted during periods of low activity in our office.

2006 – CalValidator Increased Communication with the Department of Motor Vehicles (DMV)

One challenge of maintaining the voter registration list is identifying voters as they move throughout California. Without a unique identifier, such as a driver's license, we must identify Orange County voters who have moved by using only information such as names, date of births and previous address information (if the voter provides it). If, on the other hand we have the driver's license, we can quickly and confidently identify voters that have moved in or out of Orange County.

This issue has been addressed with the CalValidator process. All voter registration records are now required to be sent electronically to the DMV in order to verify voters' driver's license data or California identification numbers. If the voter does not provide a driver's license or identification number, the voter's driver's license or identification number is provided by the DMV. This process results in virtually all of

the voter records containing a unique identification number allowing our office to track voters more easily as they move, register in another county or change their address with the DMV. As an example, if John Q. Voter moves to another county and re-registers in that county, our office can confidently cancel Mr. Voter from our voter registration list because we can match the driver's license number on our registration records to the driver's license number on his new registration record.

2007 – Real Time Processing Increased Communication with the State

In 2007, a major change was made to how voter records were updated with the State of California. Any change to the voter registration list is now sent electronically to the State on a daily basis. This includes new registrations, change of addresses, party changes and cancellations. The Secretary of State's office updates their central database, and subsequently shares this data with other counties in the State. We also receive changes electronically, on a daily basis, from the DMV through the Secretary of State's office that affect voters in our County. Previous to this change, the entire voter list was sent to the Secretary of State's office only during statewide election cycles.

If John Q. Voter moves and does not update his voter registration, our office will be notified of his new address if he updates his address with the DMV. Our office will update his voter registration record with the new address, and Mr. Voter will be able to vote at his new address for the next election. This process is extremely valuable because voters are likely to update their address with the DMV in order to keep their vehicles' registration or driver's license current.

"Over 56,000 records were updated due to changes reported by the DMV in 2010."

2008 – More Timely National Change of Address Updates

Although our office was previously updating our voter registration list based on National Change of Address (NCOA) data provided by the Post Office, the timing of the updates needed to be improved. We now run NCOA updates no more than 90 days before a major mailing. This allows our office to make updates to the voter registration list immediately before we conduct large mailings to the voters, including sample ballot and vote-by-mail ballot mailings. It is important to conduct the NCOA process close to these mailings in order to update as many voters as possible. If John Q. Voter moves and submits a Change of Address form to the Post Office, we are more likely to

"Over 222,000 NCOA records were processed between 2010 and 2012 in Orange County."

update his address before the next election and he will receive his sample ballot or vote-by-mail ballot at the correct address.

2008 – Increased Voter Follow-Up

If our office is notified of a voter's change of address, we will send a postcard to the voter in an attempt to confirm the new address. It is legally required for our office to contact a voter when a change to the voter record is triggered by a third party such as the DMV, the Post Office, or another individual. Often times, voters will move or change their mailing address multiple times within a short period. Consequently, we will receive undeliverable postcards from voters after we have attempted to reach the voter at his or her new address. For example, if we are notified that John Q. Voter has moved to a new address in another state, we will send a postcard in an attempt to contact him. If Mr. Voter has moved again, the postcard will be returned to our office as undeliverable.

In 2008, our office increased its efforts to locate voters we were unable to contact. We implemented an additional step in the National Change of Address process by sending additional postcards to voters whose original postcards were returned to us from the Post Office as undeliverable. This is a second attempt to contact the voter and update their voter registration. We first update the record based on the reason the postcard was returned and then send an additional postcard to the updated address. Additionally, if the voter has a post office box as a mailing address, we will remove the mailing address from the voter record and attempt to reach him at his residence. This additional step increases our chances of reaching a voter who has recently moved.

2009 – Ability to Check Voter Registration Added to Our Website (ocvote.com)

One of the challenges of maintaining the voter registration list is that voters do not always know if they are registered or if their registration is current. Often, the voter record has been updated without the voter's intervention, or the voter simply does not remember the latest information of their registration. John Q. Voter, for example, may have recently moved but does not remember if he registered at his new address. Now, Mr. Voter can simply go to our website and verify that his registration reflects his current address. He can also verify that his political party is correct and if he is a permanent vote-by-mail voter.

This feature not only eliminates many calls to our office, but it also

provides the ability for the voter to know at any time whether or not they need to update their information, or if it has been updated for them. If Mr. Voter does, in fact, need to update his registration, he can do so quickly and easily using the information provided on our website. One of the most popular questions from voters, “Am I registered to vote?” can now be answered online.

2010 – Website Provide Simplified Information on Voter Registration Changes

We realized that it was not always clear to voters what steps they needed to take to update their registration. The voter may need to change political parties, update the mailing address, inform our office of another voter no longer residing at the address or become a permanent vote-by-mail voter. Regardless of what the voter is required to do, it should be quick and easy to find the solution.

In 2010, an easy to understand webpage, located at ocvote.com/change, was added to the Registrar of Voters website containing all of the information needed for a voter to easily update his or her voter record. It also contains a form, which allows voters to notify our office if someone else is registered at their address. Using this webpage, a voter can quickly and easily see what actions need to be taken for any change to their voter record, and they can accomplish it using this webpage. This is a “one-stop-shop” for a voter who may need to make a change to their record.

In 2011, our office added an online voter registration form to the website, which made it easier to submit a registration form to our office. The voter can simply complete the form on our website, print and sign the form, and return it to our office. This form collects all the information needed from the voter, and because this is done online, it validates the data to ensure we receive all the required information from the voter.

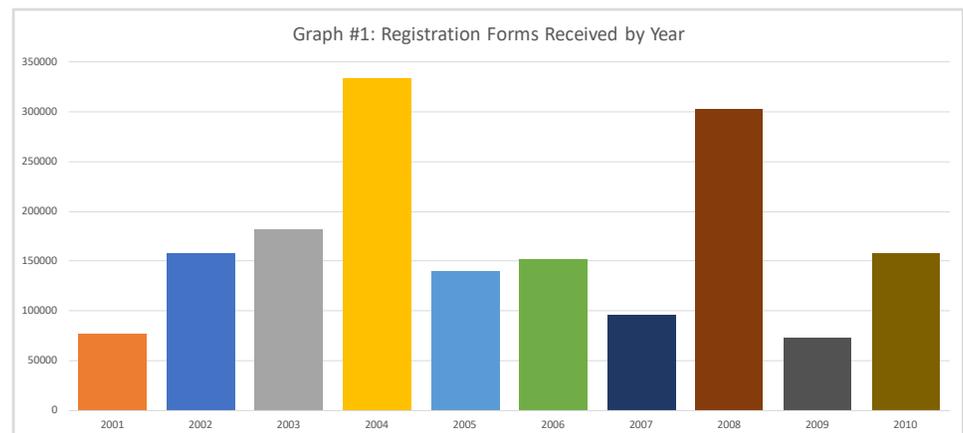
VOTER REGISTRATION AND LIST MAINTENANCE IN ORANGE COUNTY IN 2012

The voter registration and list maintenance process has improved drastically over the last five years and is much different than it was ten years ago. In order to understand the strengths, challenges and opportunities, we will examine the current process in its entirety. In the following sections we describe the voter registration process starting from the first time a voter registers, through the various life events of the voter and how our current processes address those events. This provides a better understanding of the current strengths and challenges, as well as the opportunities for improvement in the maintenance of the voter registration list.

Registering to Vote – The First Step

The first step of participation in the voting process for every citizen in the United States is to register to vote. This is an exciting moment for millions of Americans as they turn eighteen, become a citizen, or make a decision to participate in the democratic process. Voter registration forms are easily accessible and can be found in Post Offices, Libraries, DMV offices and on our website at ocvote.com/registration. A voter registration form can be used to register for the first time, or to make any change to an individual voter record. Between the years of 2001 and 2011, the Orange County Registrar of Voters processed 1,668,666 physical registration forms.

Graph #1 displays the number of physical registration forms processed by year in Orange County.



HOW A REGISTRATION FORM IS PROCESSED

Step 1: The form is delivered to the Registrar of Voters' office.

Registration forms arrive over the counter, in the mail, from registration drives and from outreach events sponsored by the Registrar of Voters.

Step 2: The form is reviewed for completeness.

Registrar of Voters staff reviews the forms, and checks that the form is completed correctly. If the form is not signed by the voter, for example, the voter is contacted by mail and/or phone to inform the voter that a signature is required by law in order to register to vote. If the form is signed, has an address and indicates that the voter is a citizen, the form is then scanned and ready for the next step.

Step 3: The form is entered into our voter registration database.

The form is now entered into our voter registration database. As a part of the data entry process, the operator checks for a previous registration in Orange County. It is determined if the voter is a new voter, or if the previous record will be updated. As it is entered, the address is adjusted using software that ensures that the address is formatted correctly for postal delivery. If the address is not a valid residential address or if there is a problem with the voter's date of birth, the voter record is entered into the database and is given a pending2 status. (Note: Less than 1% of the registrations entered in 2010 and 2011 are currently in a pending status). A letter is then sent to the voter requesting the required information, such as the voter's missing date of birth or address. When the letter is returned by the voter, the voter record is activated and is no longer in a pending status.

Step 4: The record is sent electronically to the Secretary of State's office.

The voter record is now sent electronically to the Secretary of State's office. The Secretary of State's office updates their database with the new information. Additionally, the voter record is sent through the CalValidator process, which verifies or inserts a driver's license or an

identification number if the voter does not have a driver's license. These steps do not affect the eligibility of the voter, but simply help to track the voter on a statewide level.

Step 5: The voter is notified of his or her registration.

A postcard containing the voter's address and party is sent to the voter, notifying him or her that the registration was successfully processed. In some cases, the postcard is returned to our office as undeliverable, in which case we send a follow up postcard to the voter based on the information provided by the Post Office.

Step 6: The record is proofed for accuracy.

The voter record is proofed by additional teams to ensure that the registration was entered accurately by the data entry staff member. Any required correction is made to the voter's record.

Opportunity: In order to register to vote, a voter must submit a physical form to our office. Although a voter registration form can be downloaded from the Internet, true online voter registration would allow a voter to submit a registration from a website without having to physically return the form to our office. This not only would be more convenient for the voter, but it would also create efficiencies for our office because it would eliminate the necessity to process physical forms.

Strength: In the weeks leading up to the 2008 Presidential Election, registration forms were entering our office at a rate of over 3,000 forms each day. The large number of registration forms resulted from the growing interest in the upcoming election. Our staff was able to handle the large number of registrations, including instances in which they processed over 5,000 registration forms in a single day. Every eligible registration was entered into our voter registration database for Election Day, which had the largest voter turnout in Orange County history.

The Voter is Registered – What Next?

Submitting a registration form is just one of many ways that a voter record is updated. Although many voters are proactive and notify our office if they have moved, changed their mailing address, or wish to cancel a registration, we make every effort to keep the voter

registration list current and find the voters who have not notified our office. Maintaining the voter list is a continual process that requires more than one method to keep up with voter life changes.

What follows is an examination of the process involved if a voter moves and does not re-register to vote by submitting a registration form. We will use the example of John Q. Voter moving within Orange County, and Jane R. Citizen moving out of Orange County.

The National Change of Address (NCOA) Process

If John Q. Voter and Jane R. Citizen fill out a Change of Address form with the Post Office in order to receive mail at their new address, they will be listed in the National Change of Address database. Our office will be informed of their new addresses when we conduct the National Change of Address process, which involves merging data from the Post Office with our data.

Our office has implemented a new process to find voters who may have moved, but have not completed a Change of Address form with the Post Office. We are now using credit header data to identify voters who have a new address on file with the credible third-party data provider, Experian. This is the latest, nationwide data collected by the credible third-party data provider which may have address changes not reported to our office by the Post Office, DMV or Secretary of State's office.

What is the NCOA process?

The National Change of Address process includes a check of our entire voter database for change of address records maintained by the Post Office. We then update our database to reflect the new address, and send a postcard to the voter to confirm that the change is correct. John Q. Voter, for example, recently moved within the county. His voter record is updated with the new address and he will be able to vote in the next election at the new address. Jane R. Citizen, on the other hand, moved outside of the county. Her record is made inactive³ and she will not receive future mailings from our office. If Ms. Citizen returns the postcard and confirms that she has moved outside of the county, her record is cancelled.

Timing of the NCOA process

The timing of the execution of the NCOA process is integral to its effectiveness. If a voter's address is updated by the NCOA process,

we mail a postcard to the voter to confirm the new address. We conduct this process at least 90 days before a countywide mailing in order to update as many voters as possible before the election. This also allows the voter enough time to respond to the postcard that was generated by the NCOA process. The NCOA data contains change of address records for the previous 18 months, which allows us to update all voters that may have had a change of address since the previous mailing. In other words, if John Q. Voter or Jane R. Citizen moved at any time since the last NCOA process, they will be updated by the NCOA process before the next major election.

Additional Improvements to the NCOA process

Not only has the timing of the NCOA process improved, we have also made improvements to the actual processing of NCOA records. Since 2008, we have followed up with voters whose NCOA postcards have been returned to our office as undeliverable. This can occur when a voter moves multiple times within a short period or if a voter cancels a post office box. In either case, our office sends another postcard in a second attempt to find the voter based on the undeliverable information received by the Post Office.

If, for example, Jane R. Citizen moves out of California into an apartment in another state - then quickly moves to a new residence - our office will try to contact Ms. Citizen a second time at her new residence. In another example, if John Q. Voter cancels his post office box, we will send a postcard to his residence address in a second attempt to contact him.

Strength: The National Change of Address process examines voters who have possibly moved anywhere within the country.

Challenge: The NCOA process helps to find voters who have possibly moved; however, this data is limited to voters who have submitted a Change of Address form with the Post Office. Although this is an effective way to locate these voters, we must include other ways to find voters who have moved, but have not filled out a Change of Address form.

Opportunity: Our office will continue to implement additional methods to track voters on a national level. We are currently using address data provided from a credible third-party data provider in order to identify voters who have moved, but have not notified the Post Office, DMV or Secretary of State's office.

“Over 222,000 NCOA records were processed between 2010 and 2012 in Orange County.”

Department of Moter Vehicle (DMV) Changes

If a voter moves within California and provides an updated address to the DMV, that address is transmitted electronically to our office by the Secretary of State's office. We process changes submitted by the DMV on a daily basis. If John Q. Voter, for example, moves within Orange County and submits his address change with the DMV, he remains an active⁴ voter and is able to vote in the next election at his new address. If Jane R. Citizen, as another example, moves out of Orange County and updates her address with the DMV, her voter record is cancelled⁵. Because every voter's driver's license number is entered or verified through the CalValidator process, DMV changes are very accurate and effective in maintaining the voter database.

Strength: Many people who move within California must keep their address updated with the DMV in order to maintain their vehicle registrations, update their driver's licenses, etc. This process allows our office to update voters who may not have thought to update their voter registration record.

Challenge: This process is limited to voters who have moved within California.

Opportunity: Our office will continue to look for more methods to track voters on a national level.

Undeliverable Mail

Mail that is returned to our office by the Post Office because the voter no longer receives mail at that address is referred to as "undeliverable" mail. When we receive this mail, we update the voter's record based on the information provided by the Post Office. If we receive returned mail from John Q. Voter and a new address is provided within Orange County, he remains an active⁴ voter and is able to vote in the next election at his new address. If Jane R. Citizen's mail is returned and a new address is provided outside of Orange County, she is placed in an inactive³ status, and will not receive mail for future mailings. A postcard is mailed to Jane, giving her an opportunity to verify the change of address. If she confirms that she moved out of Orange County, her record is cancelled⁵.

Strengths: Each time our office mails vote-by-mail ballots, we receive "undeliverable" records from the Post Office informing us of the voters who no longer receive mail at that address. Additionally, our office can

"Since 2008, our office has processed 328,747 NCOA records."

"There are currently over 65,000 voters who do not receive mailings from our office due to mail that was returned as undeliverable."

update records of voters who no longer receive mail at that address based on mailings conducted by third parties who purchase our voter registration database.

Opportunity: Our office will look for ways to improve the processing of undeliverable records as the Post Office improves its technology. We will explore the possible benefits provided by the use of the new "Intelligent Mail Barcode" as it relates to processing undeliverable mail. The use of this new barcode will allow our office to receive undeliverable records electronically, which can potentially save time and money when processing the records of voters who no longer receive mail at that address.

Voters Registered in Other Counties, Provided by the Secretary of State's Office

The Secretary of State's office periodically provides a list of voters registered in Orange County who have possibly moved out of the county and registered in another county. Our office verifies the possible matches to voters registered in other counties, and cancels the voters who have moved out of Orange County. The Secretary of State's office matches the voters between counties using various sets of criteria, such as name and date of birth, in order to find as many matches as possible. If Jane R. Citizen, for example, moves to another county and registers in that county, the Secretary of State's office will provide her information to our office, and we will subsequently cancel her registration.

Strength: The Secretary of State's office maintains a statewide list of registered voters, which is updated daily by the various counties in California.

Challenge: The voter must register in the other county in order for our office to be notified by the Secretary of State's office.

Opportunities: When the State implements a statewide voter database (currently scheduled for 2015) as required by the Help America Vote Act, our county will be instantly and automatically notified of a voter that has re-registered in another county.

Cancellation Requested by Voter

Of course, Jane R. Citizen can cancel her registration at any time by notifying our office. An easy-to-use form is located on our website

"Over 5,000 voters were cancelled by our office in 2010 using the list of voters in other counties provided by the Secretary of State's office."

which can be returned to our office by the voter. Additionally, if she notifies our office by phone or email, we will send a postcard to her, which allows her to verify that she truly desires to be cancelled. Our office does not automatically cancel voters from phone calls because, by law, our office cannot cancel a voter record without a signature from the voter. Only 574 voters were cancelled in 2010 because the voter notified our office before we had already updated the voter record.

Strength: Most voter cancellations do not require the voter to notify our office.

Challenge: Although it is simple to cancel a voter record, it is not necessarily a priority for many voters.

Opportunities: Our office will continue to look for other sources of data to be notified of voters that should be cancelled. We are currently using address data from a credible third-party data provider in order to identify voters who have moved, but have not notified the Post Office, DMV or Secretary of State's office. This method of updating voter records will be discussed in greater detail later in the report.

Updates Initiated by a Third Party (Someone Other Than the Voter)

A third party can initiate a change to a voter's record. As an example, if John Q. Voter moves, the new resident can inform our office that he no longer lives at that address. When our office is notified of this change, we follow up with a postcard to confirm that this change is correct. Our office has been notified by phone calls, emails, letters and faxes. In 2012, we made this process easier for third parties by using an online tool to accommodate third parties who wish to notify our office of a voter's address change.

Strength: It is easy to notify our office if a voter no longer lives at a residence..

Challenge: People generally expect that it should not be necessary for them to notify our office if someone else has moved.

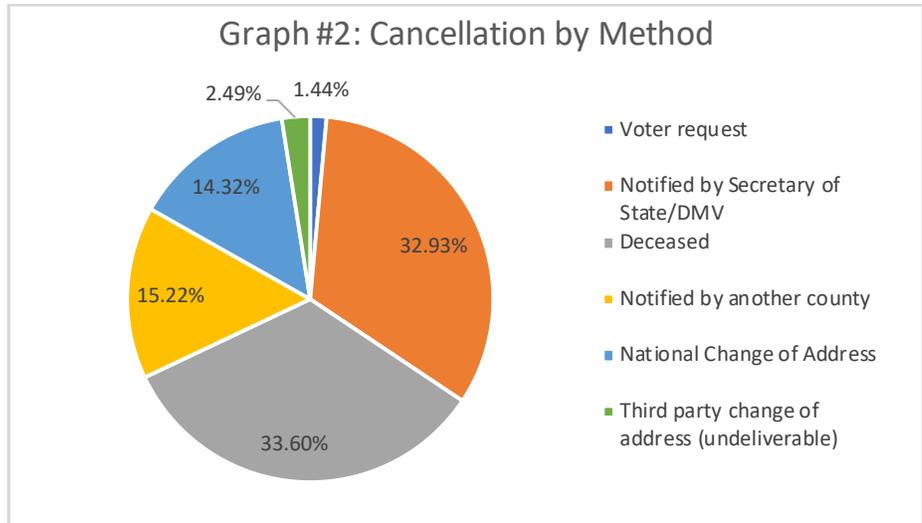
Opportunities: Our office will continue to look for additional sources of data that can be used to identify voters who have moved.

"Of the over 35,000 voters that were cancelled in 2010, only 574 were cancelled by the voter notifying our office."

Comparison of Voter Cancellations

We have described the various means that our office is notified of voters that should be removed from the voter registration list. We have also provided a comparison in order to better understand the relevance of these different methods.

Graph #2 demonstrates a comparison of various means that our office is notified of voters that should be cancelled.



DECEASED VOTERS

In order to maintain an accurate voter database, our office continually updates voter registration records to account for the unfortunate situation of a deceased voter. Upon notification of the deceased party, the Registrar of Voters cancels that voter record. Our office receives notification through the following methods:

- Periodic death records provided by the Health Care Agency.
- A list of deceased voters, which is provided by the California Secretary of State's office multiple times a year.
- The Registrar of Voters office checks the obituaries listed in the newspapers daily.
- The roster index correction request, which is available at the polling places on Election Day.
- Notification from a family member, including the name, address and date of death of the deceased.
- Returned mail that is marked "Deceased".
- The Registrar of Voters checks the Social Security Death Index if we are informed of a possible deceased voter by a third party.

Although we cancel thousands of deceased voter registration each year, there is a small number of individual voters that are not included in the notifications above, and consequently remain on the voter registration list. If the voter was not in California when he or she passed away, it is possible that we would not be informed of the death because the State of California does not receive deceased records from other states. There is also the possibility that the information on the deceased record does not correctly match the information of the voter record. Often in these situations, a third party will notify our office of the deceased voter. Although our office will conduct the necessary research to cancel the voter, we are working to minimize or eliminate the need for an individual to notify our office of a deceased voter. We are currently using other data sources, with nationwide death records, that will reduce the number of deceased voters on our voter registration list. This is also helping to identify voters who may have not deceased recently, but our office has never been notified.

When someone notifies our office of a deceased voter, we want to make it as easy as possible for the person reporting the death of the voter. If we receive a phone call or email informing us of a deceased voter, we will do as much research as possible to confirm the death of the voter, without requiring any additional steps from the person reporting it. In 2012, we added an online tool which allows a person to electronically notify our office of a deceased voter. Many times when we are notified of a deceased voter, we already have cancelled the voter through one of the methods listed above. If we have not already cancelled the voter and need to do additional research, we will check with the Social Security Death Index or submit the name to the Health Care Agency. We have developed a strong relationship with the Orange County Health Care Agency employees, who always respond quickly to confirm the information.

Our office is aware of the fact that there are deceased voters who remain on the voter registration list, and we are committed to finding new and innovative ways to identify each one of these records. We are currently implementing a new service that uses nationwide, deceased records to identify deceased voters. This is an additional service that is not required, and is not currently being utilized by other counties within California. The advantage of this service is that it not only uses the nationwide Social Security Death Index as a data source, but it also identifies matches that may have been missed due to an incorrect record. For example, if the voter record contains a nickname, and the death record contains a variation of a spelling of the name, the voter record will still be identified as a match. Our office recently conducted a test of this new service and identified 980 deceased voter records that were not previously removed from the voter registration list using the various methods listed in this report. We also examined these voter records to pinpoint the reason they were not previously identified as deceased voters. As we suspected, many of these voters had discrepancies between the voter record and the deceased record. Furthermore, most of the deceased records contained last known addresses in states other than California, which would explain why they were not previously reported to our office.

After the initial testing, our office conducted an additional, more extensive, voter comparison using this service. We identified an additional 1,152 deceased voters and removed them from the voter registration list.

Our office will continue to use nationwide data sources to identify

deceased voters, and will pursue every method possible to ensure every deceased voter is not on the voter registration list.

Strengths: Due to our various methods of cancelling deceased voters, we receive very few requests from third parties to cancel a deceased voter.

Challenges: Death records are recorded in the county in which the person passes away. If this occurs outside of California, the county in California may not be notified of the occurrence.

Opportunities: Our office is now utilizing data of deceased voters from additional data sources, specifically sources that contain nationwide death records.

“The Registrar of Voters office cancels between 800 and 1,000 records per month of deceased voters in Orange County.”

OVERVIEW OF THE ENTIRE VOTER REGISTRATION PROCESS

“Over 297,000 voter records were updated or created in 2010 in Orange County.”

We have described the various components that comprise the entire process of voter registration and the maintenance of the voter registration list. If John Q. Voter or Jane R. Citizen move, our office will be notified if they update their driver’s license, submit a Change of Address form to the Post Office, re-register in another county in California or notify our office. We will also be notified if another person contacts our office or if we receive mail returned as undeliverable. We have recently added the use of address data through the credible third-party data provider Experian, which allows us to find voters who have moved, but our office has not been notified through any of the methods listed above.

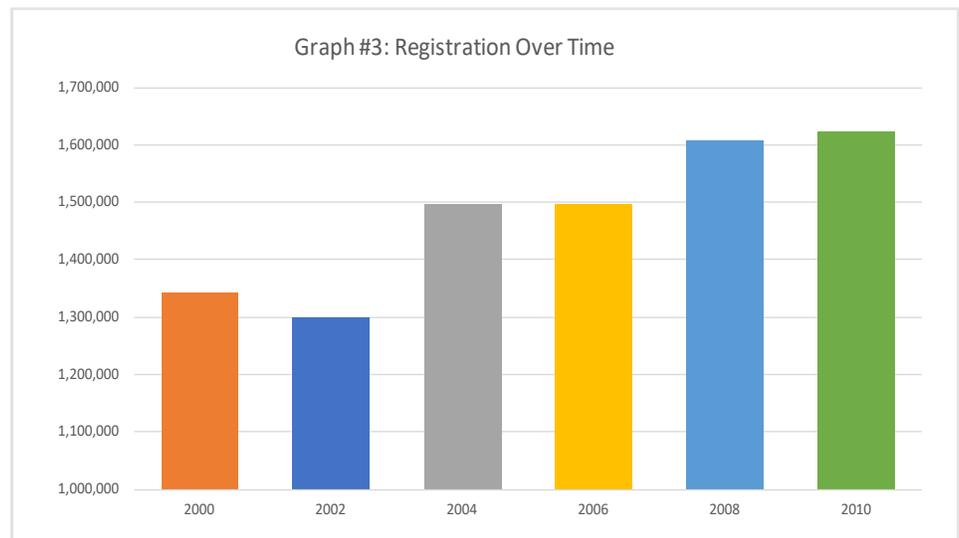
Through the various processes described above, our office updated over 297,000 voter records in 2010.

Strengths of the Process as a Whole

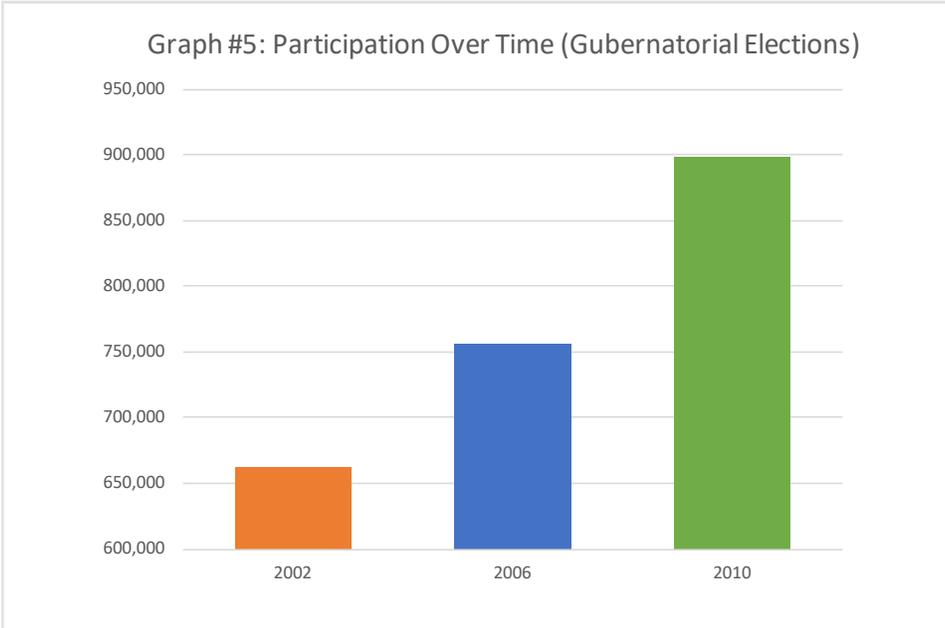
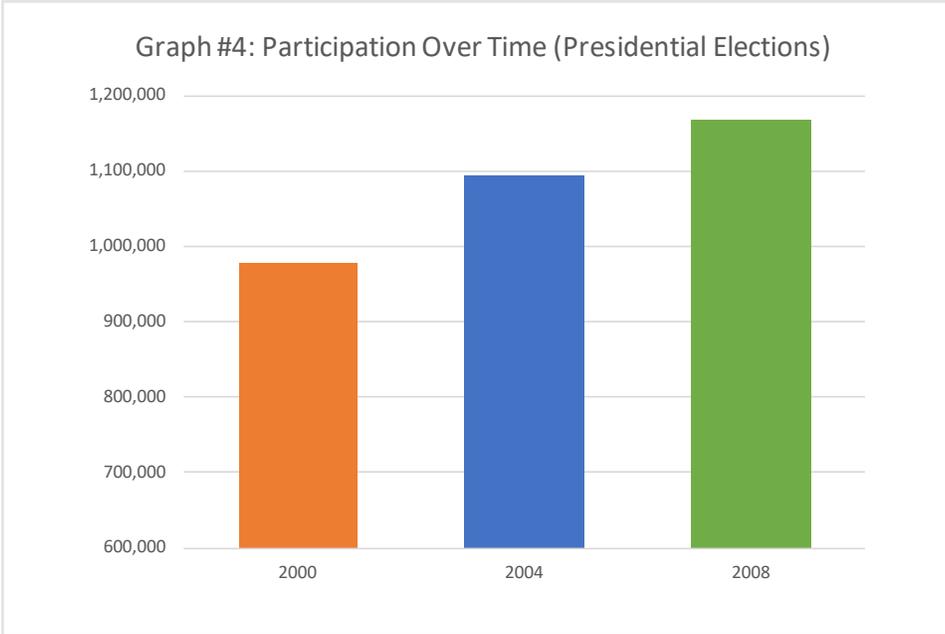
Registration and Participation Has Been Increasing

With 1.6 million voters, Orange County is the fifth largest voting jurisdiction in the country. Over the last ten years, voter registration, as well as voter participation has been steadily increasing.

Graph #3 below shows the registration totals increasing over time, using the registration totals from General Elections.



Graphs #4 & #5 below show voter participation increasing over time for the Presidential and Gubernatorial Elections in Orange County.

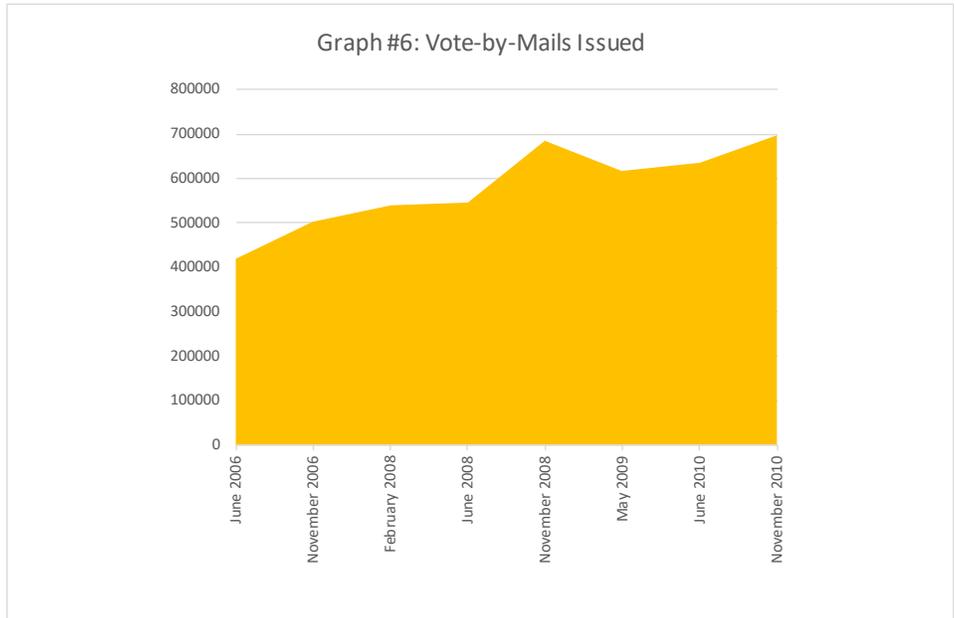


The graphs demonstrate the increasing registration and election participation in Orange County over the last ten years. Participation between the 2000 and 2008 Presidential Elections increased by almost 20%, while Census data demonstrates that the population in Orange County in the last ten years only grew by 5.8%. An accurate, updated voter registration list is imperative to providing voters the opportunity to participate in elections, and we have seen the participation of Orange County voters increasing over time.

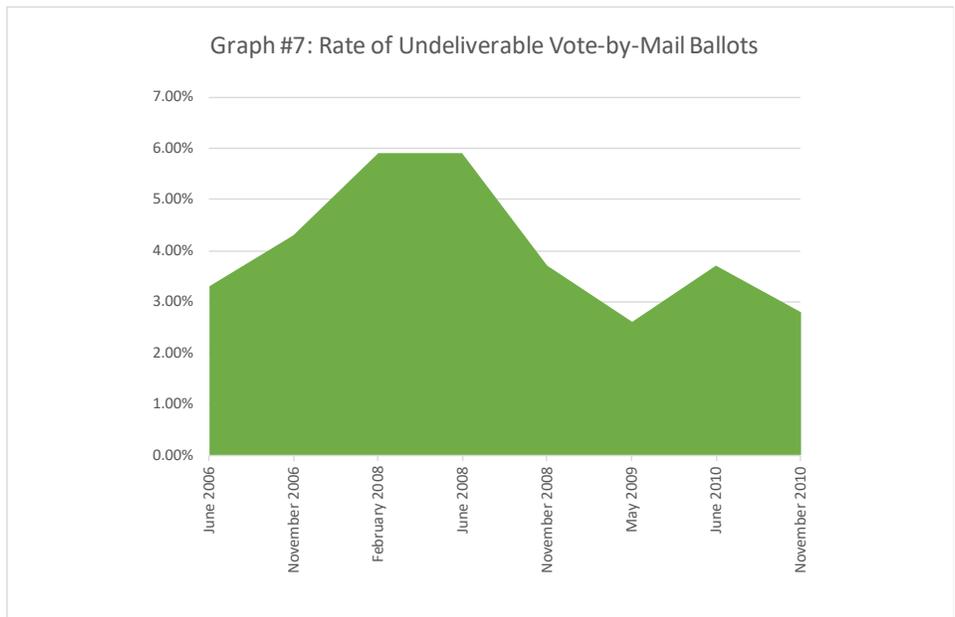
Vote-by-Mail Undeliverable Rates

Improvements our office has made since 2006 can be seen through the low rate of undeliverable vote-by-mail ballots over time. Although the rate of voters choosing to vote-by-mail has been increasing, the rate of vote-by-mail ballots returned to our office as undeliverable has improved over time.

Graph #6 demonstrates the increasing number of vote-by-mail ballots issued over time.



Graph #7 demonstrates the decreasing rate of undeliverable vote-by-mail ballots.



CONTINUED OPERATIONAL IMPROVEMENTS IN MAINTAINING VOTER REGISTRATION DATA

The Registrar of Voters is committed to continual improvement in every area of the operations, including maintenance of the voter registration list. Although many improvements have been made over the last five years, there are many opportunities ahead, which have been identified in this report. Orange County is actively pursuing these opportunities, and will continue to seek improvements in every area possible.

Nationwide Data Sharing

One of the opportunities identified in this report multiple times is the opportunity to receive data on a national level.

Orange County Registrar of Voters Neal Kelley was recently involved in a nationwide effort, sponsored by the PEW Charitable Trusts, to improve voter registration lists across the country. Although California has made improvements over the last few years with respect to sharing voter registration data across counties within the State, sharing registration data nationwide could help improve the voter registration list in every county in the country. Neal Kelley is actively involved in the effort of making this a reality, as he is a member of the Voter Registration Modernization Design Working Group, which was assembled to achieve this goal. This group has been exploring methods of sharing voter data utilizing modern technology in order to improve the accuracy of voter registration databases.

In addition to the efforts of the Voter Registration Modernization Design Working Group, our office is independently exploring other methods to update our voter registration database using alternative, nationwide data sources. One of the sources of data we are exploring is the address data provided by credible third-party data providers. Credit bureaus maintain consumer marketing demographic data, which may include address changes for voters that have not been recorded by the Post Office, the DMV or other election offices. This data is used by organizations nationwide, such as creditors, in an attempt

“Compare voter registration lists with a wider array of data sources to broaden the base of information used to update and verify voter rolls.” – The PEW Center on the States

to locate debtors and other people who may be difficult to find. The credible third-party data provider compares the address data on our voter registration list to the address data that they have on file. If the credible third-party data provider finds a more current address for a voter, they provide the new address alongside the voter data that our office provided. Our office is then able to contact the voter to verify if the new address is correct.

Alternative Data Sources – Address Data From Credible Third-Party Data Providers

We are currently testing this process using a major credible third-party data provider. This technology is regularly used for skip-tracing, but can also be effectively used to locate voters. As a test, our office sent 1,000 records to the credible third-party data provider of voters who had no recent voting or registration activity. We suspect that many of these voters may have moved, but our office was not notified through the National Change of Address process, the DMV, another election office, or by the voter. It is also possible that a portion of these voters have not moved and simply wish to remain registered at the same address.

Security of Using Address Data From Credible Third-Party Data Providers

It is important to note that although we are using data from the credible third-party data provider, we are not accessing any actual credit information for the voter. We are strictly using address data provided by the credible third-party data provider. Credit header data is the non-financial information used only to identify the person. This protects the voters' privacy and the address information is the only relevant data needed to maintain the voter registration list. Additionally, the data transmitted and received by the credible third-party data provider is secure and encrypted.

The credible third-party data provider follows the highest level of security practices, including:

- Background checks on employees
- Separation of duties
- Network security, including intrusion detection
- Virus protection

- Encrypted data
- Physical security manned 24 hours, 7 days per week by security personnel

It is also important to note that the credible third-party data provider's data is maintained at a Data Center within the United States. The particular credible third-party data provider that is partnering with the Orange County Registrar of Voters' office was ranked 6th in the business sector on Security Magazine's 500 list of top security organizations.

Results of the Test

Of the records submitted to the credible third-party data provider, a more recent address was provided for over half of the voters. Our office subsequently sent a mailing of postcards to these voters at the newly provided address in an attempt to update their voting record. If the voter moved within the county, we updated the voter record with the current address and the voter will receive election materials and vote at the correct polling place in future elections. If the voter confirmed that he or she moved out of the county, we were able to immediately remove the voter from the voter registration list. Without using the data from the credible third-party data provider that is more current, we would only be able to contact the voter at their previous, incorrect address. We would not be able to immediately cancel the voters who have moved out of the county, or update voters who have moved within Orange County using their new current address.

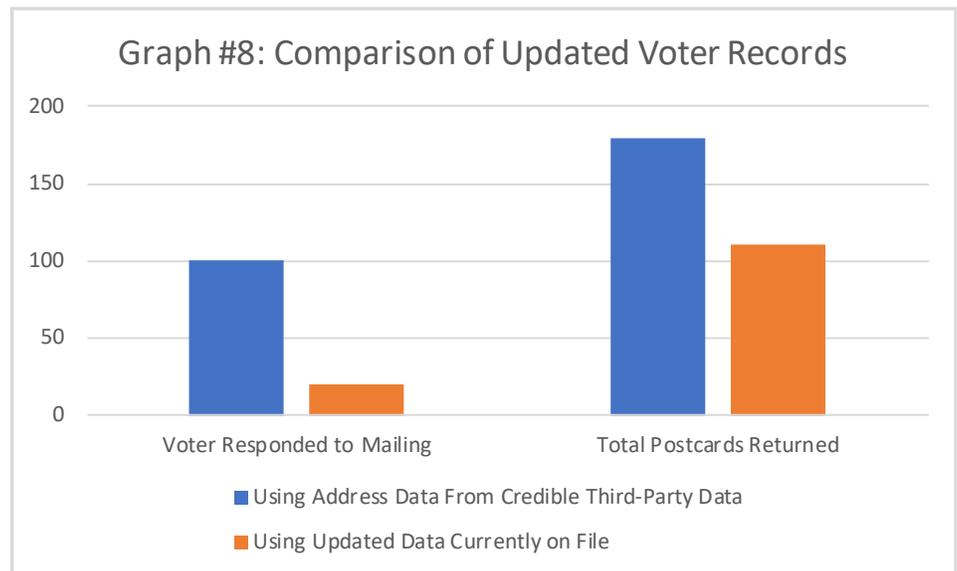
Our office also sent postcards to the remainder of the voters for whom the credible third-party data provider did not find a more recent address. The vast majority of the postcards that were sent to these voters and returned to our office were unable to be delivered, and an updated address was not provided by the Post Office. These voters became inactive¹, and eventually will be cancelled from the voter registration list.

On the other hand, the majority of postcards returned to our office that were sent to voters with a more recent address provided by the credible third-party data provider were returned and signed by the voter. In other words, we were able to contact the voters with much more success using the updated address provided by the credible third-party data provider. We were able to immediately cancel the voters who confirmed that they have moved out of Orange County.

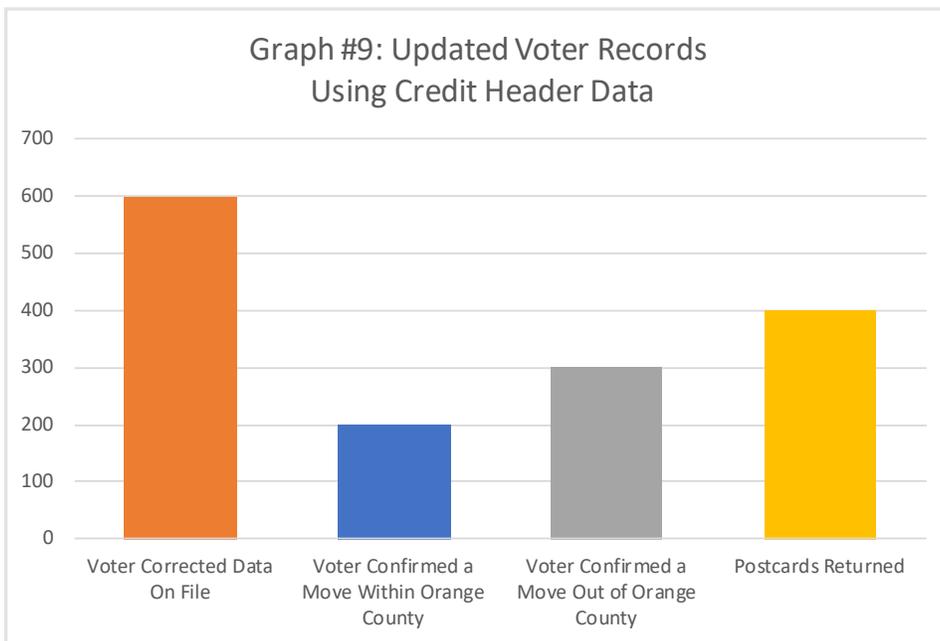
The voters who have moved within Orange County will be able to vote using their correct address data. Although some of the postcards sent to the voters with an updated address were not able to be delivered by the Post Office, a newer address was provided by the Post Office for many of these voters. We will make a second attempt to reach these voters at the new address provided by the Post Office.

It is clear that using address data provided by a credible third-party data provider is more effective when trying to contact voters who have possibly moved. Although our office can simply attempt to contact these voters using their addresses on file, we will have better success of actually reaching the voters if we use the additional data provided by the credible third-party data provider. Consequently, our voter registration list will be more accurate if we implement this process and continue to use the additional source of data. This is a new process that our office is testing, and is not being utilized by any other election office in the country.

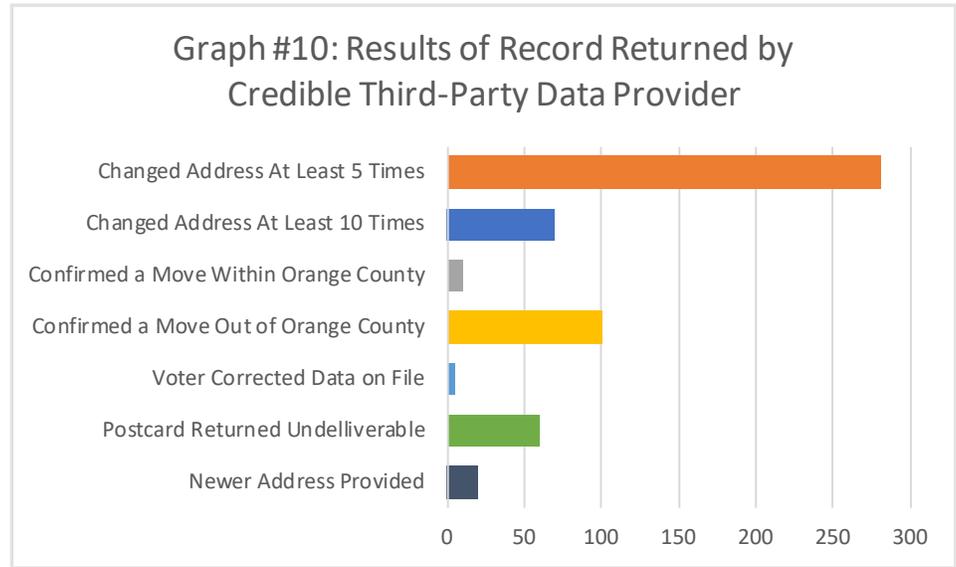
Graph #8 compares the overall number of voter records our office was able to update using credit header data vs. using the addresses currently on the voter registration list. You can see that using credit header data was much more effective in reaching voters, and subsequently updating their voter registration records.



Graph #9 gives a detailed breakdown of our use of data provided by the credible third-party data provider. It demonstrates that credit header data is much more effective at identifying voters that have moved out of Orange County. This is likely due to the fact that this contains nationwide data, which is an area of opportunity identified throughout the report. We were able to immediately remove these ineligible voters from the voter registration list, because we were able to locate these voters using this additional data. This graph also demonstrates that using credit header data results in fewer postcards that are unable to be delivered. Additionally, a greater number of these postcards that were unable to be delivered contained a newer address, which provides another opportunity to locate the voter.



Graph #10 shows the results of the data returned by the credible third-party data provider. It shows that the credible third-party data provider identified new addresses for over 500 of the 1000 records that were submitted to them. It also demonstrates the large number of voters who move or change their address frequently. For example, 281 voters used in our test moved or changed their address at least 5 times since they updated their voter record.



Expanded Use of Address Data from the Credible Third-Party Data Provider

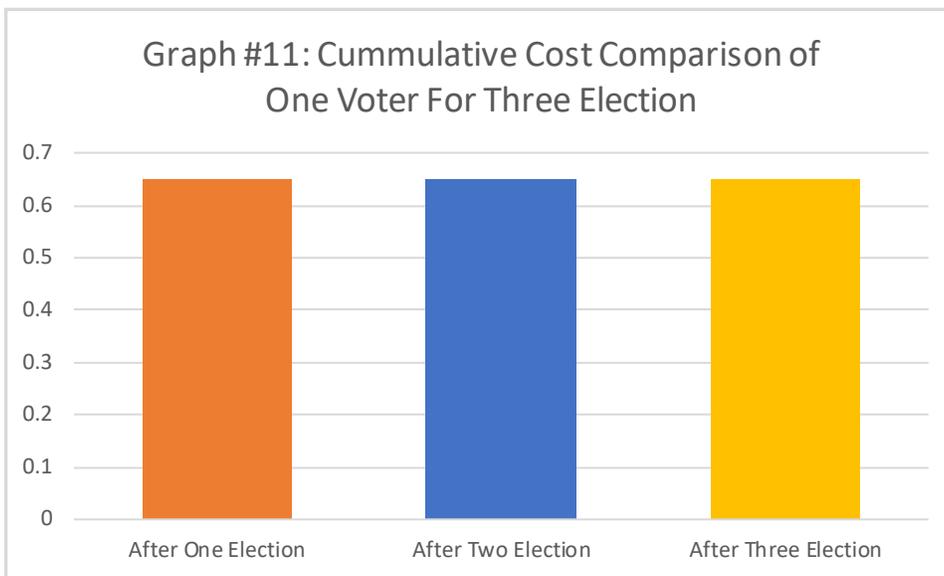
After the successful test of using updated address data provided by the credible third-party data provider to locate voters, our office expanded the use of this data by attempting to reach 250,000 voters who have not participated in any election in the last four years. The credible third-party data provider provided updated addresses for over 122,000 of these voters. Our office sent postcards to the voters with a more recent address provided by the credible third-party data provider, and the results were overwhelming. Specifically, 18,800 of these voters were reached at their new address, and returned the postcard to our office. From these returns, we were able to cancel 16,000 voters, and update the addresses of 2800 voters who still live in Orange County and wish to remain registered to vote.

Savings from Updating Voters Using Addresses Provided by a Credible Third-Party Data Provider

The use of address data provided from a credible third-party data provider allowed our office to correct address records of 18,800 voters.

These voters were not updated through the many other processes used by our office in order to maintain the voter registration list, but were only able to be located using the data provided by the credible third-party data provider. These voters would have otherwise been sent a sample ballot, and in many cases a vote-by-mail ballot, at an incorrect address. Our office will save \$17,000 each election because we will not be printing or mailing sample ballots and vote-by-mail ballots to outdated addresses of these voters.

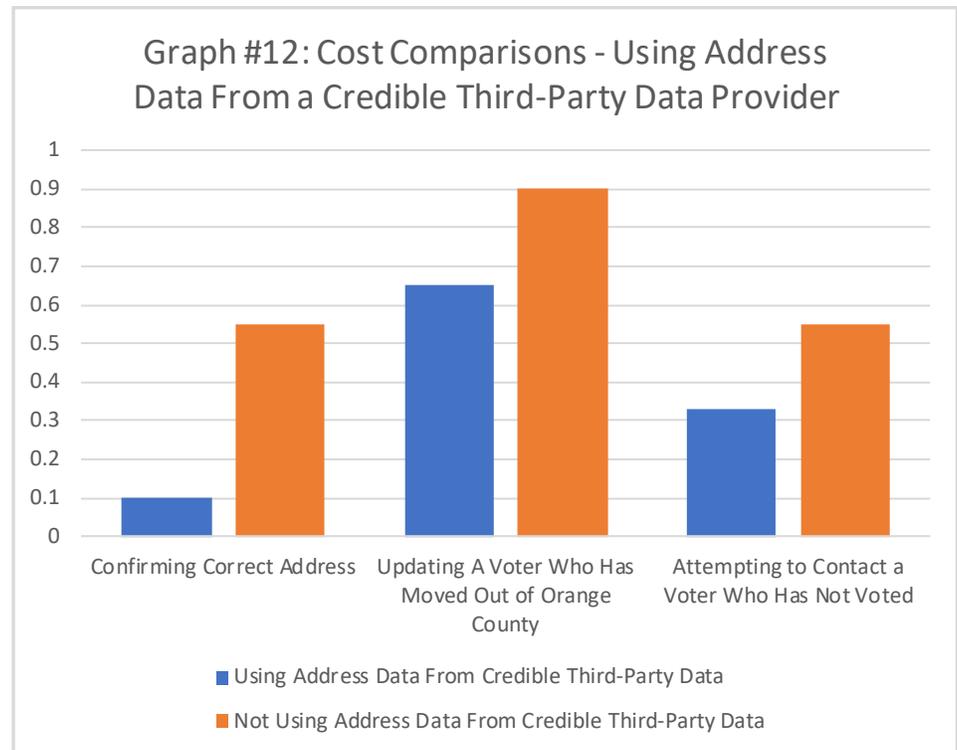
Graph #11 demonstrates the comparison of costs for one voter using updated address data from a credible third-party data provider, versus mailing a Sample Ballot to an incorrect address.



There are other potential cost savings or cost avoidances that can result from using address data from a credible third-party data provider. We are currently limited in our ability to realize all of these cost savings, because we are not presently authorized by State law to update voter registration records until we receive confirmation from the actual voter; however, using the address data from credible third-party data providers would open up new possibilities for cost savings. For example, using credible third-party data provider data would allow our office to confirm the addresses of voters who have not moved, while avoiding mailing an unnecessary postcard to the voter in order to confirm their address has not changed. Another area of potential savings would result from the ability for our office to immediately make a voter inactive who has moved out of Orange County based on the data returned from the credible third-party data provider. This could potentially eliminate the mailing of ballot materials for at least

one, but possibly more, elections if our office has not been notified by any other method that the voter has moved. An additional area of potential savings is by contacting a voter who has not voted in at least four years using address data provided by the credible third-party data provider, instead of the address data currently on file. If the voter has moved, our office will send a postcard to the correct address, instead of attempting to contact the voter at the wrong address. Contacting the voter at the wrong address typically results in a postcard being returned to our office as undeliverable.

Graph #12 demonstrates the potential cost savings in various areas using address data provided by a credible third-party data provider.



Online Voter Registration and the Statewide Voter Database

One way to improve the voter registration process is to implement online voter registration. Although one can easily print a voter registration form online, true online voter registration would allow a voter to complete the process online without a requirement to mail a registration form to the Registrar of Voters' office. The path to online voter registration has some major obstacles, which we are attempting to address. It is required by law to submit an electronic signature provided by the DMV in order for a voter to register completely online. This requires not only cooperation of the DMV, but a large investment

of money and resources by the DMV to provide this capability to the online voter registration system. Despite these obstacles, Orange County is working with the California Secretary of State's Office, as well as its voter registration system vendor, in order to implement true online voter registration in California before the 2012 Presidential Primary Election in June.

Another method to improve the process is a statewide voter registration database, which will be implemented in California in the future, as required by the Help America Vote Act. The statewide voter registration database will improve the sharing of voter data within California, and allow voters to register in other counties in California without having to submit a new registration form. This is slated for current implementation in 2015.

Increased Accuracy Using Performance Measures

In 2010, our office began to track the number of corrections that were required to be made to voter records. These corrections result from illegible writing of the voter, or simply from data entry errors. This data is shared with the unit that maintains the voter registration list in order to track overall performance and to identify why individual errors are made. This information is used to improve the process, and to inform staff members of common errors. The number of required corrections has already decreased since we began tracking this data in early 2010.

APPENDIX A: 2020 UPDATE

Success of Using a Third-Party Data Provider

The Orange County Registrar of Voters was the first in California to use a third-party data provider as an additional method to update its voter registration database. The advantage of using this service is that it finds potential updates to those records that all other traditional methods of updating voters were unable to find. Orange County has utilized this service in every even-numbered year since its pilot in 2010, and the results are listed below:

Year	Updated Records Received	Voter Confirmed Update
2012	122,000	18,800
2014	82,000	8,000
2016	60,000	25,000
2018	137,000	22,300
Total:	401,000	74,100

The limitation of the other methods of updating voters that are outlined in this report is that those methods capture a new address only after the first time a voter has moved. Our office does not typically receive notifications if the voter moves again. Using the third-party data provider, this can track voters after they have moved any number of times. This is extremely helpful because voters often move multiple times in relatively short periods of time. Additionally, once a voter is placed into an inactive status, it can be difficult to subsequently locate the voter because they are not participating in the voting process or receiving mail.

In the latest use of the third-party data provider in 2018, almost all the voters who confirmed updates were from inactive voters who have moved out of Orange County.

This method of voter list maintenance has allowed our office to contact voters that we would not have been able to contact using other maintenance activities allowed by law. It has not only resulted in hundreds of thousands of dollars of savings in printing and mailing costs, but it has also improved the accuracy of the voter list.

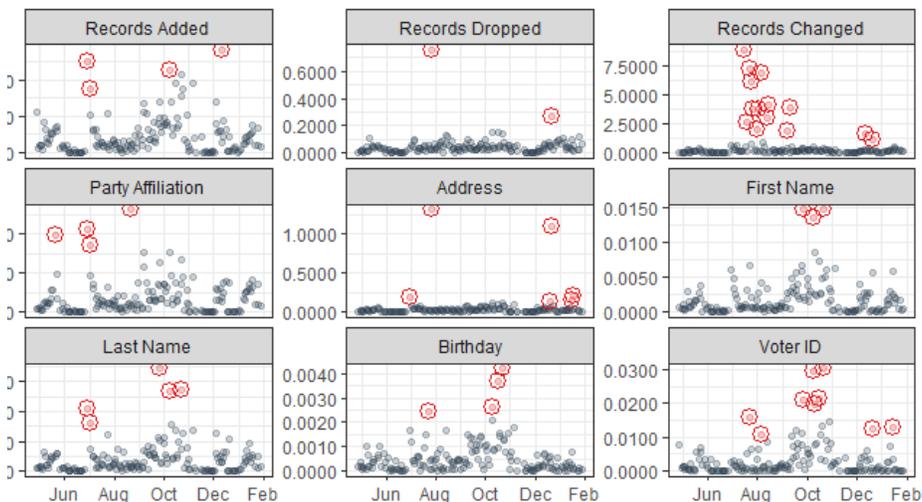
“Orange County has updated 74,100 voters through a Third-Party Data Provider, who were not located through traditional methods.”

Collaboration with Caltech

The Orange County Registrar of Voters entered into a partnership with the California Institute of Technology (Caltech) in 2018. Caltech examined our voter registration list in an attempt to assess the accuracy of the list, develop methods to increase the accuracy of the list, and provide methods of detecting anomalies in the database.

The results of this collaboration have been invaluable. Caltech has developed a statistical model, which also produces visual representations that help detect statistical anomalies. This not only provides insight into voter registration activities, but it can also improve security by identifying unexpected changes to the voter registration data. If an anomaly is detected, it allows the jurisdiction to determine if it was due to legitimate voter registration activities, or if there is a bigger problem that needs more research. As we strive toward increasing security and voter confidence in voter registration data, this is a very valuable tool.

Below is an example of a graph that can be used to detect statistical anomalies.



“Statistical modeling helps to identify potential anomalies or unwanted voter registration updates.”

As an example, if there were a large number of registration changes, but other data points were not changed that would typically be expected through those voter registration activities, this could indicate a potential issue. This could be a powerful tool in identifying a potential breach.

Caltech also examined the duplicate checking process used in Orange County and throughout the State. Through this examination, Caltech

has identified additional matching criteria that can be utilized to better detect duplicate registrations. Our office will present these findings to the State, in the hopes that the algorithms and matching criteria are implemented Statewide to increase the accuracy of detecting duplicate voter registration records.

Additionally, Caltech provided the following analyses of elections in Orange County:

Voter fraud: The team ran near real-time analyses of election returns in search of statistical anomalies that might be caused by administrative issues, procedural glitches, or fraud.

Social media: They looked at social media data in search of complaints from voters about problems such as excessively long lines at their polling place or absentee ballots that never showed up in the mail. They have developed a tool that scrapes tweets and classifies them according to geography, positive-or-negative sentiment, political orientation of the poster, and the nature of the problem the poster experienced.

Surveys: Poll workers and voters were surveyed about any problems they witnessed and their perceptions about the integrity of the voting experience.

Observers: Caltech students served as election observers. They also looked for any reported problems or unusual activity.

Although there were issues reported through the above activities, there were no major issues of concern reported. However, Orange County has taken the input provided from Caltech and has made changes to improve the processes in voter registration list maintenance, as well as other election activities.

Conversion to a Statewide Voter Registration Database

One of the most sweeping changes to voter list maintenance in recent years occurred in 2016 when California's Statewide Voter Registration Database became the system of record.

Registrations Processed at a State Level

Voter registration activities now occur at a state level. As an

example, when a voter registers, the entire list of voters in the State is checked to determine if the voter is a new registrant, or if the registration is an update to an existing voter registration record. This happens in near real-time, and it occurs at the centralized database. Before the implementation of the statewide voter database, voter registrations were processed in each county's separate database, and batch files were shared with the State on a nightly basis to determine if the registrations were new, or updates to existing registrations. This previous method was not as conducive to a timely and accurate voter database as the current centralized database.

Voter Information Stays with the Voter

Before 2016 when a voter moved to a different County within California, the voter history -including elections in which the voter voted, and voter registration transactions-would not be transferred to the new County. After the advent of the Statewide Voter Registration Database, all voter and registration history remains with the voter's record as long as they are in California.

Improved Duplicate Matching

The process of detecting duplicate voters has improved dramatically with the implementation of the Statewide Voter Registration Database. Based on various duplicate matching criteria, the duplicate matching process occurs every time a voter registration record is added. If a match is found, it can be categorized as a "high confidence match", or a "potential match". A "high confidence match" is automatically processed, and a voter's record is updated without user intervention. An example of a "high confidence match" would be if the driver's license, name and birth date all matched exactly. This is a strong enough match for the system to process without requiring manual intervention. A "potential match", on the other hand, requires user intervention. The "potential match" is presented to an operator, who determines if this is a re-registration or a new voter. An operator has access to and utilizes information such as signature images and registration history which allows the operator to make an informed decision.

Before the implementation of the Statewide Voter Registration Database, printable reports were periodically sent by the State to each individual county with a list of potential duplicates amongst all other counties. Every potential duplicate record was manually reviewed by the affected County and manually canceled if it was determined

to be a duplicate. The counties throughout the State used their own duplicate matching criteria, and only had access to limited information. Since the implementation of the Statewide Voter Registration Database, many of these activities happen automatically, the duplicate checking criteria is consistent amongst the counties, and they have access to complete voter information throughout the State.

Involvement in Developing Standards

During the implementation of the Statewide Voter Registration Database, Orange County was one of four counties to participate in user acceptance testing. During this phase of the project, which was before the transfer to the Statewide Database, we tested various use-case scenarios and reported our findings to all the parties involved in the implementation including the Secretary of State and the election management system vendor. This process involved weeks of detailed testing and collaboration with various members of the project. This testing helped to identify and mitigate potential problems before implementation. It also allowed Orange County to develop an in-depth understanding of the system and provide input for operating standards. Additionally, Orange County was the first County in California to migrate to the Statewide Voter Registration Database. As one would expect with any major system implementation, issues were discovered through the process; however, the migration was relatively smooth and successful. All counties in the State of California have been successfully operating on the Statewide Voter Registration Database since 2016.

Continual Involvement and Collaboration

Orange County continues to be involved in developing standards with the Statewide Voter Registration Database by participating in a Business Process Committee. This committee collaborates and subsequently provides guidance for counties in California. The goal of this guidance is to ensure consistent processing of voter updates and registrations. As an example, it is important that voter registration update dates are applied consistently, so all counties can confidently determine which update to the voter record is the most recent. Since all counties are interconnected with one database, it is important that we are all updating voter records consistently.

Shift to Online Registration

The ability of voters to register completely online was implemented in

California in 2012. Since that time, the preferred method of registering to vote has shifted from paper registrations to online registrations. As an example, in 2018, 400,929 registrations were processed from online submissions, while 83,285 paper registrations were processed. As a comparison, in 2012, 87,860 registrations were processed from online submissions, while 173,332 paper registrations were processed.

Advantages of Online Registration

There are several advantages resulting from the ability of voters to easily register online:

- Voters can view their current registration status before submitting a new registration.
- Voters do not need to wait for mailing times or need to travel to physically return their registration.
- The ease provided by online registration increases the likelihood of a voter to submit a registration (as evidenced by the above graph).
- Processing registrations is more efficient for Registrars' offices because paper registrations do not need to be scanned or interpreted by data entry operators.
- Voter registration data is entered by the registrant themselves, which reduces the likelihood of an error in the data due to transcriptions from data entry operators.

DMV Registrations

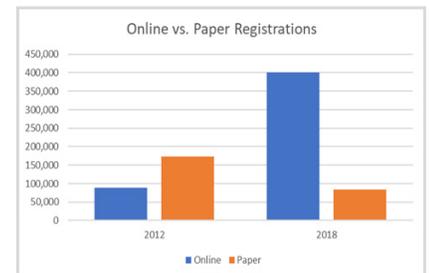
Due to the implementation of (Bill Number), the ability for voters to update or add a new registration while obtaining or updating a driver's license was added in 2018. Through this process, our office received 68,708 new registrations, and 147,872 re-registrations through the DMV in 2018.

DMV Registration Process

When a voter obtains or updates a driver's license, whether on paper or in the office, they are given the option of registering to vote or updating their current registration. If the voter chooses to do this, their information is transferred to the Registrar's office, and it is processed in the same manner as any other registration.

Non-Citizens and the DMV

If a voter does not indicate they are a citizen, under penalty of perjury,



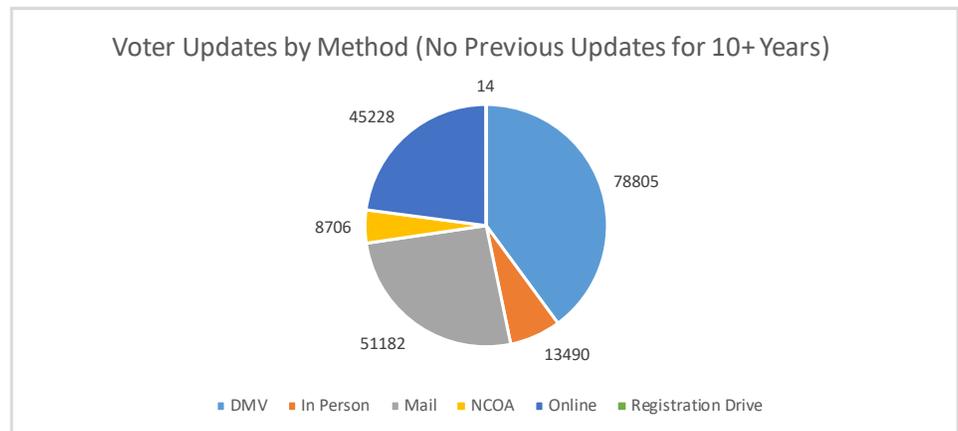
The above chart demonstrates the dramatic shift of voters registering using paper to registering online.

“DMV registrations have accounted for the majority of updates to voter records that have not been updated in at least 10 years.”

no information is shared by the DMV with the Registrar’s office.

Advantage of DMV Updates

One of the benefits our office has experienced from the ability for voters to update their registrations when obtaining or renewing a driver’s license, is that this process has resulted in voter registration updates that may not have otherwise occurred. Specifically, from the registrations we received through the DMV, over 78,000 were updates to voter records that had not previously been updated in 10 or more years. There are several advantages to receiving this updated information, including the fact that our office receives a more current signature image, and that we have confirmation of the voter’s address.



Continual Voter Registration Updates

The combination of recent advancements in technology for voter registration, and our continual efforts to find new ways of improving voter registration list maintenance has resulted in large numbers of updates to the voter registrations. Below is a chart showing the number of updates made to voter registration records since 2012.

These voter updates are a result of voter registrations submitted by voters, and the various list maintenance procedures used by Orange County. The number of voter registration updates in 2018 alone is over 55% of the 1.5 million registered voters in Orange County. This large scale updating of voter records is evidence that the voter registration list is current and accurate.

Sources of Voter Registration Updates

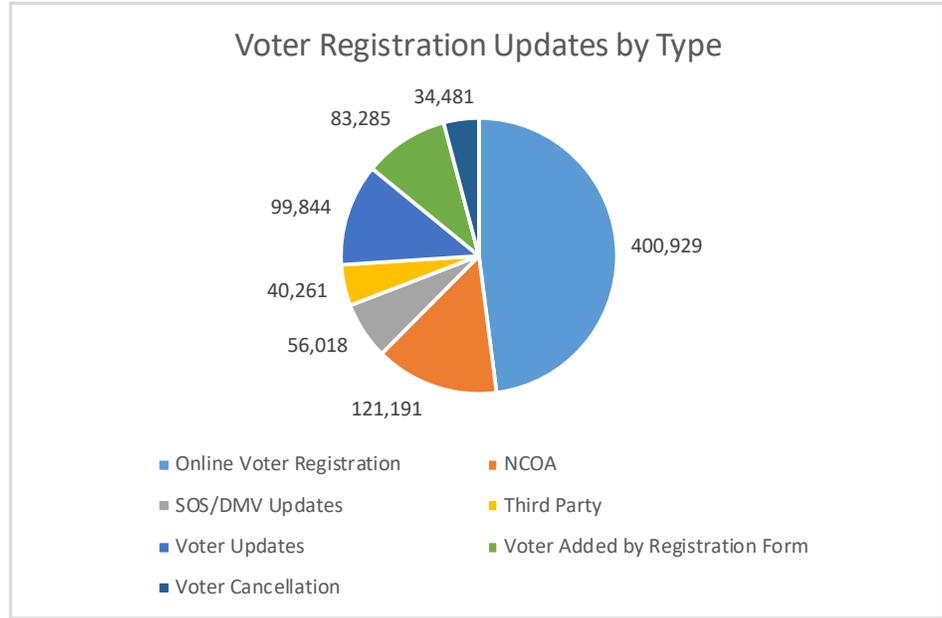
Our office maintains the voter registration database using various data sources. As shown in the chart below containing data from 2018, the majority of updates to the database come from the voters themselves through online voter registrations. This is likely due to the

ability of voters to easily submit an update or a new voter registration completely online. The sources of voter registration updates are broken up into the following categories:

- Online Voter Registration – The voter submits a new registration, or an update to the existing registration using California’s online voter registration system.
- National Change of Address (NCOA) – A voter submits a change of address card with the Post Office. Our office updates the voter’s address and sends a postcard to the voter to confirm the address update.
- Secretary of State (SOS)/DMV Updates – The Secretary of State’s office provides certain voter registration updates including deceased records, change of address data from the DMV, and voters that are ineligible due to their felony status.
- Third Party Updates – These updates are obtained through a method other than the voter themselves. These updates mostly consist of updated addresses obtained through the mail that was returned to our office with a forwarding address provided. A postcard is sent to the voter to confirm the address update.
- Voter Updates – This category includes updates to the voter records that need to be manually processed. These updates include information or corrections provided by voters through correspondence.
- Voter Added by Registration Form – These updates include voters who submitted a paper registration form. These are either new registrations or re-registrations that were submitted by the voter.
- Voter Cancellation – This represents voter cancellations that are processed manually. These cancellations are created by deceased records that were researched by our office, cancellation requests from voters, and notifications from other jurisdictions that the voter is now registered in that jurisdiction.

Year	Voter Registration Updates
2012	905,537
2013	494,197
2014	621,137
2015	425,233
2016	1,008,726
2017	424,955
2018	836,009

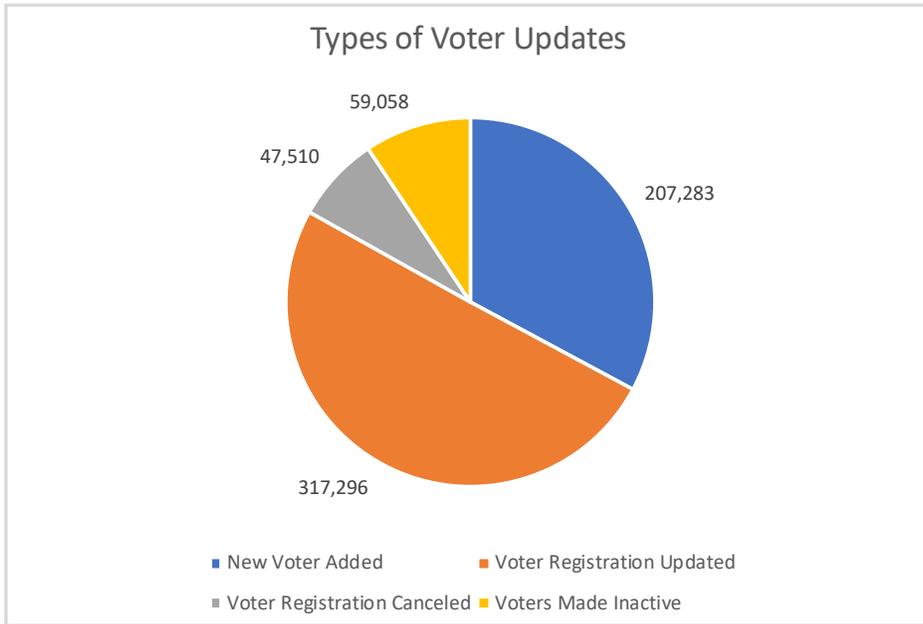
Voter Registration Activity	Counts
Online Voter Registration	400,929
NCOA	121,191
SOS/DMV Updates	56,018
Third Party	40,261
Voter Updates	99,844
Voter Added by Registration Form	83,285
Voter Cancellation	34,481



Results of Voter Registration Updates

The chart below demonstrates the results of the various voter registration activities used by our office in 2018. The results are broken into the following categories:

- New Voter Added – This represents voter registrations processed for voters who were not previously registered in Orange County.
- Voter Registration Updated – This represents registration activities that resulted in an update to an existing voter record in Orange County.
- Voter Registration Canceled – This represents voters who were removed from the eligible list of voters due to moving out of the County, death, or the voter’s request to be removed.
- Voters Made Inactive – An inactive voter is eligible to vote; however, no longer receives mail from our office. Voters are made inactive due to a lack of participation or voter updates for four years, or due to a third-party notification that the voter moved out of Orange County. If the voter confirms they should no longer be registered in Orange County, the voter is canceled.



Type of Voter Update	Count
New Voter Added	207,283
Voter Registration Updated	317,296
Voter Registration Canceled	47,510
Voters Made Inactive	59,058

Evidence of Accuracy

There are several metrics that can be used to measure the accuracy of the voter registration list.

Low Percentage of Uncounted Ballots

One measure of the accuracy of the voter registration list is the number of ballots that were not counted. There will always be ballots that are not counted for legitimate reasons; however, a low percentage of ballots not being counted is an indicator that the voter registration list is accurate. This means a very high percentage of voters were able to participate and have their ballots counted. Below is a table displaying the percentage of ballots that were not counted due to voters not being registered at the time of the election. This table demonstrates a very low percentage of voters that fall into this category, which points to a highly accurate voter registration list.

Year	Not Counted Due to Not Registered	Total Ballots Cast	Percentage
2012	12,303	1,133,204	1.09%
2014	3,294	640,358	0.51%
2016	15,148	1,239,405	1.22%
2018	15,353	1,106,729	1.39%

Low Number of Undeliverable Ballots

Another indicator of an accurate voter registration list is the number of

vote-by-mail ballots that were returned to our office due to an address that was undeliverable by the Post Office. There will always be some ballots returned to our office as undeliverable, because residents of Orange County move throughout the year. However, the lower the number of undeliverable ballots means a higher number of voters that received their ballot at their correct address. In 2018, for example, over 97% of the voters in Orange County received their ballot at their correct address. The low percentages of undeliverable ballots below demonstrate that our continued efforts to keep the voter registration list as current as possible are paying off.

Year	Undeliverable	Ballots Mailed	Percentage
2018	34,232	1,125,952	3.04%
2016	28,450	1,022,831	2.78%
2014	36,613	786,894	4.65%
2012	20,643	811,603	2.54%

APPENDIX B

1. “Upgrading Democracy: Improving America’s Elections by Modernizing States’ Voter Registration Systems” (Washington D.C.: Pew Center on the States, November 2010)
2. Pending Voter Status – A voter is placed in a “pending” status if he or she has submitted a registration form without critical registration information, such as date of birth. A voter may also be placed in this status if the address provided is not a valid, residential address. Voters are contacted and informed of their pending status, and will become an active voter once the correct information is received.
3. Inactive Voter Status – A voter is placed in an “inactive” status if our office is notified that the voter no longer lives at that address and a new Orange County address is not provided. The voter is sent a postcard to confirm the new address. If the voter confirms that he or she has moved out of Orange County, the registration is cancelled. Additionally, if the voter does not vote in two, consecutive general elections, the registration is cancelled.
4. Active Voter Status – A voter is registered and will receive mail at the address on file.
5. Cancelled Voter Status – A voter is cancelled from the registration list, and is required to re-register to receive mail and to vote in the next election.

Cost Comparison Charts

	One-Time Cost	Cost After One Election	Cost After Two Elections	Cost After Three Elections
Transaction Fee of Using Address Data From Credible Third-Party Data Provider	0.1			
Cost to Mail Postcard	0.23			
Cost of Returned Postcard From Voter	0.32			
Cost of Sample Ballot Postage		0.21	0.42	0.63
Cost of Sample Ballot Printing		0.67	1.34	2.01
Total	0.65	0.88	1.76	2.64

	Confirming Correct Address - Using Data From Credible Third-Party Data Provider	Confirming Correct Address - Not Using Data From Credible Third-Party Data Provider	Updating a Voter Who Has Moved Out of Orange County - Using Data From Credible Third-Party Data Provider	Updating a Voter Who Has Moved Out of Orange County - Not Using Data From Credible Third-Party Data Provider
Credible Third-Party Data Provider Transaction Fee	0.1		0.1	
Postage to Contact Voter		0.23	0.23	
Postage of Returned Postcard From Voter		0.32	0.32	
Sample Ballot Printing				0.67
Sample Ballot Postage				0.21
Total:	0.1	0.55	0.65	0.88