



# VOTE BY MAIL IMPLEMENTATION PLAN

**LAVote.net**

LOS ANGELES COUNTY  
Registrar-Recorder/County Clerk

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## **Item 12. Develop an implementation plan, including a cost analysis, for providing Vote by Mail ballots to all voters for the 2020 General Election**

### **EXECUTIVE SUMMARY**

Item #12 in the Board Motion passed by the Los Angeles County Board of Supervisors on March 10, 2020, directs the Department to develop an implementation plan, including a cost analysis, for providing Vote by Mail (VBM) ballots to all registered voters for the November 2020 General Election.

Based on the Department's analysis, it is projected to cost \$21.6 million to provide a VBM ballot to all registered voters for the November 2020 Election – an election where the County's voter registration rolls are expected to sore to more than 5.7 million voters. This represents an increase in cost of 174% (\$13.7 million) from the \$7.9 million currently budgeted for VBM for the election. It is expected that approximately \$4.9 million of these costs will be offset by reimbursement received from managed voting jurisdictions. Further funding may be made available through the Coronavirus Relief Fund (CARES Act) and/or related state funding, but the certainty of these funds and any estimates of those amounts are unknown at this time.

Compared to the March 2020 Election, the number of VBM ballots to be mailed represents an increase of 59% (2.1 million ballots). Additionally, an increase in voter turnout for the November 2020 Election is expected based on historical trends. For this analysis, the assumption is that the County will continue to provide an in-person voting option at Vote Centers; therefore, any potential cost impacts associated with Vote Center facilities and respective operations are not considered here.

Many key areas have been factored into the costs and the implementation plan to mail a VBM ballot to every registered voter including:

1. Securing space sufficient to support increased capacity for inbound VBM operations;
2. Executing contract amendments and strengthening relationships with County vendors who are vital to VBM operations;
3. Forecasting staff and resource needs to accommodate the increased volume of individual VBM ballots returned via mail, at drop-off box locations and at Vote Centers;
4. Confirming voters' language preference well in advance of VBM ballot production, therefore reducing the number of second ballot requests subsequent to initial mailing and demonstrating linguistic sensitivity;
5. Raising awareness that all registered voters, not just Permanent VBM (PVBM) or one-time request voters, will receive a VBM ballot through a multicultural and multilingual media campaign; and,
6. Mitigating against the increased volume of undeliverable VBM packets because of incorrect or incomplete mailing addresses.

The implementation plan confirms the Department should have enough time to achieve the goal of mailing a VBM ballot to all registered voters based on an aggressive schedule and associated dependencies identified. To be successful, the Department must receive direction from the Board by May 15, 2020.

## IMPLEMENTATION PLAN SUMMARY

This report provides a plan to mail a ballot to every registered voter in addition to offering in-person voting services at Vote Centers for the November 2020 Presidential General Election. This is an acceleration of the requirement in the Voter's Choice Act (VCA), for Los Angeles County to expand to mailing ballots to all registered voters by 2024 (four years after initial VCA implementation). This report includes external factors likely to influence the implementation approach, the key implementation activities and timely decisions required, estimated costs to support the increased volume, and key considerations to be addressed in order to mail a ballot to every registered voter for the November 2020 election.

Implementing the proposed model provides some key benefits such as:

- Acts as a “fail safe” voting opportunity if voters cannot vote at a Vote Center.
- Expands the voting period for all registered voters as mail ballots go out 29 days prior to the election.
- Encourages physical distancing and protects voter safety at a time of COVID-19.
- Provides full flexibility for voters to either vote by mail from their home, drop off their ballot at a convenient location or vote in person at a Vote Center.
- Results in proactive early achievement of the 2024 VCA requirement.

The number of VBM voters — both Permanent VBM (PVBM) and one-time VBM requests — is increasing incrementally year over year and from election to election. Recent incremental increases alone are greater than the total VBM volume in many other jurisdictions. Statistically, Los Angeles County issues and processes more mail ballots than any jurisdiction in the country by a significant margin even before the expansion assumed in this report.

For context, the County of Sacramento (implemented VCA in 2018) has 818,656 total registered voters, and the County of San Mateo (implemented VCA in 2018) has 417,299 total registered voters as of February 18, 2020. The County of Orange (implemented VCA in 2020) has 1,634,407 total registered voters as of February 18, 2020.

For the March 2020 Presidential Primary Election, 65% of registered voters (nearly 3.6 million) requested or were legally required to receive a VBM ballot. This is an increase of more than 880,000 VBM ballots, since the November 2018 General Election, in which 52% of registered voters (approx. 2.7 million) requested a VBM ballot.

At today's VBM volumes, the Department is stretching its capacity and requires additional resources (funding, staff, facility, storage) to support the projected increase. Mailing a ballot to every registered voter, in addition to offering in-person voting services at Vote Centers, will present even greater challenges to existing capacity constraints. Securing the required level of resources must be an immediate priority for the County.

Mailing a ballot to every registered voter would result in the following projected increases over current volumes and capacity. It is important to note that this analysis assumes the County will continue to provide Vote Centers for voters for the November 2020 Election. The impact of who chooses to cast their vote at a Vote Center and the subsequent increase/decrease on Vote Center operating costs are not considered in this analysis, as we have no historical comparison

to work with and in recognition of strong community advocacy for maintaining proportionate and accessible in-person voting options.

Area	March 2020 Election	November 2020 Election (Projected)*	Delta	% Change
Registered Voters	5,513,057	5,723,104	210,047	3.8% ↑
# of VBM Ballots Mailed	3,582,930	5,723,104	2,140,174	59.7% ↑
% Voter Turnout	69.4% (2016 Presidential General)	74.0%	4.6%	6.6% ↑
# of VBM Drop Box Facilities	206	382	176	85.2% ↑
% of Voter Turnout who Voted via VBM Ballot	53.8%	65.0%	11.2%	20.9% ↑
Number of Voters mailed a VBM Ballot who Chose to Vote in Person	404,852	1,482,284	1,077,432	266.2% ↑
Space for Inbound VBM Operations (Sq. Ft)	19,488	28,084	8,596	44.1% ↑

\*Projections are derived from historical County trends and data from other California jurisdictions.

The Department developed the implementation plan included here, which reflects the key tasks, milestones and respective due dates to provide a VBM ballot to all registered voters for the November 2020 Election. This implementation plan has activities starting immediately, including negotiations with needed vendors.

To be successful, the Board must provide direction by May 15, 2020. Should the Board decide to proceed with mailing a ballot to every registered voter, timely decisions on the following items will be required:

- Approval of identified funding to support increased volumes.
- Directing CEO Real Estate to work with RR/CC to identify, secure and modify facility space sufficient to meet projected incoming VBM processing volume.
- Approval of lease agreement(s) for additional space, as deemed necessary.
- Expedited approval of contract amendments or new contracts with critical vendors.

The following factors, further explored in this document, could influence the Board’s decision to mail a ballot to every registered voter, alter legislation and/or guide the County’s approach. Similarly, each scenario will influence the minimum number of Vote Centers required for the November 2020 Election.

- **Scenario 1:** Board of Supervisors can elect to enact full adoption of the VCA in advance of 2024 directive.
  - Minimum number of Vote Centers open 10 days prior to Election Day: 114
  - Minimum number of Vote Centers open 3 days prior to and on Election Day: 572
- **Scenario 2:** Senate Bill 968 or other related legislation could mandate that “*Every registered voter receives a VBM ballot*” while maintaining the same ration of Vote Centers to registered voters used in the March 2020 election.
  - Minimum number of Vote Centers open 10 days prior to Election Day: 191
  - Minimum number of Vote Centers open 3 days prior to and on Election Day: 763
- **Scenario 3:** An Executive Order by the Governor to provide all voters a VBM ballot is under consideration for November 2020
  - Projected minimum number of Vote Centers open 3 days prior to Election Day: 572

The Department is proactively planning and engaging with its critical partners now in the event the Board decides to mail a ballot to every registered voter for the November 2020 Election. Discussions with critical partners, such as its VBM print and mailing vendor and the United States Postal Service (USPS), are ongoing to finalize the key tasks, milestones and associated costs (where applicable). Information presented in this analysis is based on preliminary discussions that have occurred since March 10, 2020, and represents the Department’s most recent analysis.

## METHODOLOGY AND KEY EXTERNAL FACTORS

### ***Methodology***

In response to the Board Motion, the Department conducted due diligence to develop a plan and estimated cost to provide a VBM ballot to all registered voters in the County for the November 2020 Election.

Data was gathered from the following stakeholders and sources to inform this analysis:

1. Statistics and trends from previous General Elections administered by the County.
2. County’s VBM print and mailing vendor
3. County’s VBM Ballot Drop-off Box manufacturer
4. Voter’s Choice Act: Vote Centers and Mail Ballot Elections
5. Federal and Non-Profit organizations
6. RR/CC subject matter experts

### ***Key External Factors***

At least three external factors will influence the Board’s decision, as well as RR/CC’s approach and potential cost to provide a VBM ballot to all registered voters in the County.

1. **Adoption as authorized in the Voter’s Choice Act (VCA):** In 2020, RR/CC implemented the VCA model under provisions of Elections Code 4007 specific to Los Angeles County, under which mailing a ballot to every registered voter would not be required until four years after initial adoption. The Board of Supervisors has the authority

to adopt the VCA model applicable to all other counties in California where every registered voter is mailed a ballot for the November 2020 Election. Adoption would increase the minimum number of VBM ballot drop-off boxes required and would reduce the minimum number of Vote Centers per the requirements set forth in the VCA. This option afford the County the greatest local control and flexibility.

2. **Legislative Mandate:** Senate Bill 968 has been introduced to amend Section 4007 of the Elections Code to read “*Every registered voter receives a vote by mail ballot.*” This would compel the County to mail a ballot to every registered voter while maintaining the minimum number of VBM ballot drop-off boxes and Vote Centers per the same requirements from the March 2020 Election as set forth in the VCA specific to Los Angeles County. Similar legislation (AB 860) responsive to COVID-19 and the November 2020 election has been introduced in the Assembly.
3. **Executive Order:** Governor Newsom recently signed Executive Orders responsive to the COVID-19 pandemic requiring counties to mail every voter a ballot for special elections in Congressional District 25 and Senate District 28 on May 12, 2020, and for special elections scheduled in local jurisdictions on June 2, 2020. The Secretary of State has convened a working group to propose similar conditions for an Executive Order that would apply to the November 2020 Election. The minimum number of VBM ballot drop-off boxes and Vote Centers as well as a shorter voting period (e.g., open 3 days prior to and on Election Day) are among the items under consideration.

## IMPLEMENTATION PLAN

### ***Implementation Tasks and Schedule***

The Implementation Tasks and Schedule below reflect the key tasks, milestones and respective due dates to provide a VBM ballot to all registered voters for the November 2020 Election. They are based on initial discussions with vendors and assume the Department can, in a timely manner, amend existing contracts to support increased volume, obtain necessary funding, and recruit staff at the estimated quantities. It is important to note that the Department will be competing with other jurisdictions for supplies and services from VBM vendors – anecdotally, the County’s VBM vendor has informed us that it is receiving increased demand from clients across the State for VBM materials amid the COVID-19 pandemic.

Implementation tasks are organized within the following work streams:

#### **1. Legislative, Policy and/or Executive Order**

Decisions and direction provided by regulatory bodies (i.e., Legislature, Governor, BOS) on whether the County is to proceed with mailing a ballot to all registered voters for the November 2020 Election. These decisions and direction need to be provided by May 15, 2020, if the Department is to successfully execute this implementation plan.

#### **2. Contract Negotiations**

Discussions with key VBM partners. These discussions are actively underway and will continue to determine implications to current capacity and contract terms in the event the County decides to mail a ballot to every registered voter for the November 2020 Election. Amendments to the following contracts are expected, contingent on the Board’s direction:

- Contract to reflect the projected increase in volume for printing, assembly, pre-sorting and mailing of VBM packets. This contract amendment needs to be executed by May 29, 2020 (158 days prior to Election Day; e-158).

- Contract to procure additional automatic signature verification machines to support the expected increase of returned VBM ballots needs to be executed by June 12, 2020 (144 days prior to Election Day; e-144).

### 3. Outbound Vote by Mail Logistics

The key steps to print, assemble and mail the VBM packets by the County's VBM vendor. Based on the increase in volume, there are key deadlines for RR/CC to provide data and approval to the VBM vendor so that production timelines are not jeopardized, and there are milestones by when VBM ballots are required to be mailed. This includes:

- Ordering VBM envelopes with the County's VBM vendor no later than May 15, 2020 (172 days prior to Election Day; e-172)
  - The County's VBM vendor has informed us that the envelope industry also is being affected by the COVID-19 pandemic. Ordering of envelopes may need to be even earlier as many jurisdictions are seeking to mail a VBM ballot to all registered voters.<sup>1</sup>
- Providing all ballot styles to the County's VBM vendor no later than September 9, 2020 (55 days prior to Election Day; e-55)
  - The County's VBM vendor stands firm that production deadlines must be met to support mailing a ballot to all registered voters. The County is therefore responsible to maintain fidelity to these milestones and quickly resolve issues which may cause delays (i.e., approval of measure(s) to be placed on the ballot, etc.).
- Sending ballots to Uniformed and Overseas Citizens on September 19, 2020 (45 days prior to Election Day; e-45)
- Mailing ballots to all registered voters on October 5, 2020 (29 days prior to Election Day; e-29)

### 4. Ballot Drop-off Locations

The tasks required to identify VBM ballot drop-off locations and enter into agreements, procure and install drop-off boxes. For the March 2020 Election, 206 drop-off locations were available. As of April 2020, there have been 36 24-hour VBM ballot drop-off boxes installed in the County and an additional 74 boxes remain in inventory to be installed. The Department will need to secure additional VBM ballot drop-off locations given the minimum threshold required by the VCA. Based on the projected voter registration, a minimum of an additional 346 VBM ballot drop-off locations will be required.

The Department intends to install as many 24-hour ballot drop-off boxes as possible and will continue to supplement the permanent boxes with staffed ballot drop-off locations. As the County is conducting multiple elections leading up to the November 2020 Election, recruitment of locations and installations of 24-hour VBM ballot drop-off boxes are actively underway.

The VBM ballot drop-off box manufacturer requires a 16- to 18-week production lead time. This will require the County to confirm its anticipated order by early May. The COVID-19 pandemic is expected to drive an increased demand for drop-off boxes nationwide, which

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<sup>1</sup> The Department evaluated the viability of employing peel and stick return envelopes, but determined that they are non compatible with mail ballot processing equipment and cost prohibitive.



may impact the capacity and lead time of the County's VBM ballot drop-off box manufacturer. All drop boxes must be installed and in place by October 5, 2020 (29 days prior to Election Day; e-29).

**5. Facility and Storage Build-Out**

The current space to process returned VBM ballots and to store VBM ballots after they have been tallied are at capacity. Additional operational space and secure ballot storage space is required for increased volume of returned VBM ballots. A preliminary analysis has been completed, but the Department must work quickly with CEO Real Estate to engage a third-party space planner to conduct a comprehensive space analysis to support November and all future elections. The facility must be operational by September 18, 2020 (46 days prior to Election Day; e-46).

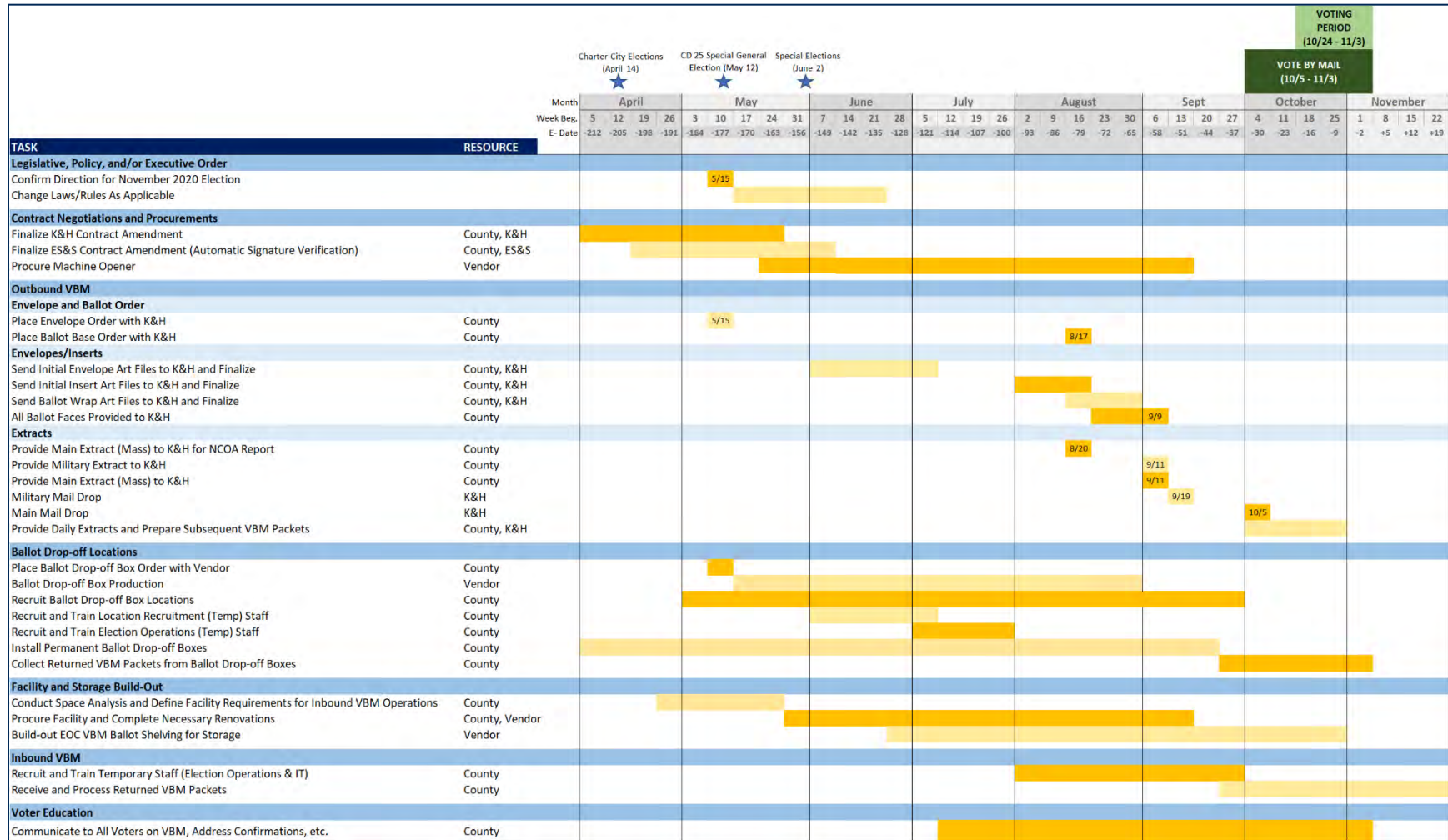
**6. Inbound Ballot Process**

The projected increase in returned VBM ballots will require an increase in temporary/seasonal staff to ensure RR/CC can prepare and tally returned VBM ballots timely. VBM ballots may be returned beginning October 5, 2020, (29 days prior to Election Day; e-29) and the process will continue through and beyond Election Day.

**7. Voter Education**

Provide frequent communication to voters that all registered voters will receive a VBM ballot and highlight the multiple, available methods to cast their ballot. Create outreach campaigns to educate voters who have historically not cast their vote via a VBM ballot, to capture preferred language choice and to potentially confirm residency. Educate voters on the availability of tools to track the status of their VBM ballot.

Figure 1. Implementation Tasks and Schedule for November 2020 Election



**Implementation Costs**

It is estimated to cost \$21.6 million to provide a VBM ballot to every registered voter for the November 2020 Election. This is an increase of 174% (\$13.7 million) from the \$7.9 million currently budgeted for VBM costs for the election. It is expected that approximately \$4.9 million of these costs will be offset by reimbursement received from managed voting jurisdictions. This is a revenue increase of \$3.1 million, or 172%, over the expected \$1.8 million currently in the budget.

Further funding may be made available through the Coronavirus Relief Fund (CARES Act) established by the Federal Government or other funding provided by the State of California in conjunction with COVID-19 related legislation. But the certainty of these funds and any estimates of those amounts are unknown at this time.

**Table 1. Cost Analysis Summary**

<b>Cost Category</b>	<b>Estimate</b>
<b>1. VBM Outbound Total:</b>	<b>\$ 8,572,346</b>
VBM Vendor (K&H)	\$ 7,658,653
Postage (USPS)	\$ 821,826
County Staff (Temp)	\$ 91,867
<b>2. Ballot Drop-Off Boxes Total:</b>	<b>\$ 1,379,536</b>
Supplies and Equipment	\$ 749,590
County Staff (Temp)	\$ 629,947
<b>3. VBM Inbound Total:</b>	<b>\$ 5,075,779</b>
Automated Signature Verification Vendor (ES&S)	\$ 202,364
Postage (USPS)	\$ 1,154,077
Supplies and Equipment	\$ 87,485
Space and Storage	\$ 1,055,197
County Staff (Temp & Contract)	\$ 2,576,656
<b>4. Outreach Total:</b>	<b>\$ 6,529,256</b>
<b>(A) Estimated Costs to Mail Ballot to All Registered Voters for November 2020 Election:</b>	<b>\$ 21,556,917</b>
<b>(B) Budgeted VBM Costs for November 2020 Election From Recommended 20/21 Budget:</b>	<b>\$ 7,868,622</b>
<b>% Change Relative to Budgeted VBM Costs ((A - B) / B):</b>	<b>174.0%</b>
<b>(C) Expected Revenue from Mailing Ballot to All Registered Voters for November 2020 Election:</b>	<b>\$ 4,937,970</b>
<b>(D) Expected VBM Revenue for November 2020 Election From Recommended 20/21 Budget:</b>	<b>\$ 1,809,783</b>
<b>(E) Projected Net County Cost Increase to Mail Ballot to All Registered Voters for November 2020 Election (A - B - C + D):</b>	<b>\$ 10,560,108</b>

**Implementation Considerations and Decisions Required**

The following key considerations must be addressed to ensure successful implementation.

**1. Additional Space to Support Inbound Vote by Mail Operations**

While the foundational infrastructure is in place to print, assemble, mail, collect and tally VBM ballots, the volume of returned VBM ballots during the March 2020 Election stretched and exceeded current operational capacity in certain areas of the VBM operation.

Returned VBM ballots are currently processed on the third floor at RR/CC headquarters. Operations have exceeded space capacity to process any increase in the number of returned VBM ballots over the 2020 March Election. Based on the projected number of returned VBM ballots in November 2020, in which a ballot is mailed to all registered voters, inbound VBM operations estimates a minimum need for 28,084 square feet of processing space.

\*Note: The future state estimate of space required and associated costs do not include any additional space needed for staff to maintain physical distancing associated with any future COVID-19 protocols.

Area	Current State Volume & Space	Future State (Estimate)*	% Change
Returned VBM Ballots	1,141,594	1,778,905	55.8% ↑
Square Footage of Inbound VBM Operations	19,488	28,084	44.1% ↑

**Resolution Plan:** Identify and confirm availability of space that supports effective and efficient inbound operations. Identify areas within the process that can be automated (i.e., extractions) to help alleviate the density of people in an area.

**2. Contract Amendments and Strengthened Vendor Relationships**

The County relies on key vendors for the most critical VBM operations, as summarized in the table below. Mailing a ballot to all registered voters will require increased capacity for each vendor. Resources will need to be recruited and onboarded. Additional equipment must be procured to meet volume. As such, RR/CC may require exemptions from the current County hiring and purchasing freeze as well as expedited approval of new or amended vendor contracts.

**Table 2. County’s Key Vendors for VBM Operations<sup>1</sup>**

Partner	Scope	Key Considerations	Resolution Plan
K&H	Conducts VBM outbound operations, including: <ul style="list-style-type: none"> <li>▪ Prints VBM packet material</li> <li>▪ Validates mailing address data</li> <li>▪ Assembles VBM packets</li> <li>▪ Pre-sorts VBM packets</li> <li>▪ Drops off VBM packets to USPS</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contract must be amended to support increased volume of VBM packets</li> <li>▪ An increase in materials will be required and orders must be placed on-time to ensure fulfillment</li> <li>▪ K&amp;H supports many CA jurisdictions with VBM-related operations and is experiencing an increase in requests across the State</li> </ul>	<ul style="list-style-type: none"> <li>▪ Receive exemption from the current County purchasing freeze</li> <li>▪ Finalize contract amendment and confirm orders by stated deadline in the implementation plan</li> </ul>
United States Postal Service	Mails VBM packets, including: <ul style="list-style-type: none"> <li>▪ Delivers VBM packet to voter</li> <li>▪ Returns undelivered VBM packets to RR/CC</li> <li>▪ Delivers returned VBM ballots to RR/CC</li> </ul>	<ul style="list-style-type: none"> <li>▪ The USPS may not have the capacity to receive and process over 5.7M VBM packets on one day</li> <li>▪ All other voting jurisdictions are looking at all Vote by Mail options</li> <li>▪ Unlike in a Primary Election environment where dates vary by state, the November 2020 Election is the same day for the entire nation.</li> </ul>	<ul style="list-style-type: none"> <li>▪ USPS is conducting an analysis regarding its capacity to process the increased volume of VBM packets timely</li> <li>▪ K&amp;H and USPS are in ongoing discussions on potential strategies to mitigate the risk</li> </ul>

<sup>1</sup> To adjust to an all vote by mail ballot system, the RR/CC will need to update most of its contracts. While the RR/CC believes this can be accomplished within the proposed timeline, some contractual negotiations may take longer than anticipated due to factors out of the RR/CC's control. If that occurs, the RR/CC's timeline may be impacted.

Partner	Scope	Key Considerations	Resolution Plan
Runbeck	Maintains and supports the County's Election Management System, which maintains the County's voter records and synchs with the SOS's VoteCal for voter registrations	<ul style="list-style-type: none"> <li>▪ Changes to a voter's mailing address are not automatically translated to the VBM module in the Election Management System, which is where the data is maintained, extracted and sent to K&amp;H</li> <li>▪ RR/CC must manually maintain the addresses, which is both time and resource intensive</li> <li>▪ Additional IT resources are required to support critical responsibilities in support of VBM data needs</li> <li>▪ RR/CC must be exempt from the County's hiring freeze</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improve the quality control (QC) process between RR/CC and K&amp;H to ensure that all voter records are accounted for in the data file sent to K&amp;H, and that K&amp;H mails the VBM packets to all expected voters</li> <li>▪ Develop and thoroughly test scripts, including a review and validation by Runbeck, before use in a live election</li> </ul>
ES&S	Provides and maintains the Automated Signature Verification (ASR) machines	<ul style="list-style-type: none"> <li>▪ Contract may need to be amended to procure additional ASR machines to prevent delays in preparing the returned VBM ballots for tallying</li> </ul>	<ul style="list-style-type: none"> <li>▪ Receive exemption from the current County purchasing freeze</li> <li>▪ Finalize contract amendment and confirm procurement by stated deadline in the implementation plan</li> </ul>
California Secretary of State (SOS)	Maintains the State's voter registration database (VoteCal)	<ul style="list-style-type: none"> <li>▪ Voters who elect to receive a VBM ballot and choose to vote in-person must have their VBM ballot suspended</li> <li>▪ The suspension must be reconciled with VoteCal, which is operated by the SOS</li> <li>▪ If there is an increase of suspended VBM ballots, VoteCal must have sufficient capacity to support the increased reconciliation requirements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Identify opportunities to improve the process to suspend VBM ballots</li> <li>▪ In collaboration with the SOS and the County's PollPad vendor, conduct volume testing to ensure the additional volume can be supported</li> </ul>

3. **Volume of Individual VBM Ballots Returned at Vote Centers Expected to Increase**

**Consideration:** 26% (303,821) of returned VBM ballots were received at Vote Centers during the March 2020 Election. This was the second preferred method to return VBM ballots; 69% (805,740) were mailed through the USPS. It is anticipated this voter behavior will continue with increasing numbers of VBM ballots returned at Vote Centers.

**Resolution Plan:** Install standalone VBM ballot drop-off boxes at Vote Center locations and expand the size and capacity of the VBM ballot drop-off box collection team.

4. **Number of Requests for Preferred Languages Expected to Increase**

**Consideration:** Voters who previously did not receive VBM ballots will not receive one in their preferred language if RR/CC is not aware in advance of their language preference. Given the language diversity in the County, the Department expects to receive an influx of requests for VBM ballots in a different language once the VBM ballot has been mailed and delivered.

**Resolution Plan:** Use a voter's preferred language to receive the Sample Ballot as a reference point. Increase communication to voters on the process to notify the Department of its preferred language well in advance of VBM ballot production.

5. **Voter Education will be Critical**

**Consideration:** As previously highlighted, 65% of registered voters (nearly 3.6 million) requested or were legally required to receive a VBM ballot for the March 2020 Election. Therefore, the remaining 35% of registered voters may not be familiar with, or have not previously voted using a mail ballot. Voter education will be of paramount importance to ensure there is awareness and understanding that all registered voters are to receive a VBM ballot, as well as to inform them of their options to request a language-specific ballot and the full set of options available to them for returning their ballot or voting in person.

**Resolution Plan:** Effective and frequent communication to the entire voter population including eligible, but not registered and registered voters, specifically targeting those who are not PVBM voters. A large-scale multicultural awareness campaign is critical to educating the public about changes in the voting experience and how voters will be impacted. In addition to a large-scale multicultural and multilingual media campaign, the Department is working with mailing vendors to prepare direct mailings to all registered voters in the County. The direct mailing will give voters specific instructions on how to return the mailing – at no cost to the voter. The messaging, artwork, target strategy and timing of all mailings is still being developed.

The direct mailings have three objectives:

- Raise general awareness that all registered voters will receive a VBM ballot
- Confirm voter residency
- Provide voters an option to request multilingual materials

It is a high priority to send such mailings as soon as possible so that the Department has sufficient time to receive responses and update records prior to the first VBM extract, which is due to the County's VBM vendor by August 20, 2020.

6. **Number of Undeliverable VBM Packets is Expected to Increase**

**Consideration:** Prior to mailing VBM ballots to voters, the Department checks the National Change of Address (NCOA) database, which maintains change-of-address form requests, to determine whether a voter's address has changed. Where changes are required, the Election Management System is updated. The VBM vendor conducts another validation after receiving the list of voter records from RR/CC to further ensure voters receive their VBM ballot as scheduled and to reduce the influx of undeliverable mail. However, there remains a portion of VBM ballots returned as undeliverable because of incorrect or incomplete mailing addresses. The amount of undeliverable mail is expected to grow, which will require an increase in resources and capacity to update the voters' mailing addresses, remake the VBM ballot, and mail new ballots in advance of Election Day.

**Resolution Plan:** Considering the timeline and implications of mailing a ballot to every registered voter, explore the feasibility of sending residency confirmation communications to voters in advance of VBM ballot production to ensure up-to-date mailing addresses. Determine additional capacity and resource requirements (both RR/CC and vendors) to efficiently address the remaking and mailing of undeliverable VBM packets well in advance of election calendar deadlines. Procure additional capacity and recruit resources based on projections.

**ATTACHMENT**

VSAP VBM Implementation – Cost Analysis



**Los Angeles County Registrar-Recorder/County Clerk**

VBM Implementation Plan - Cost Analysis

April 24, 2020

Version 7.1

**Introduction:** This Cost Analysis is developed in response to Item No. 12 in the Board Motion, dated March 10, 2020, which directs the Department to develop an implementation plan, including a cost analysis, for providing Vote by Mail (VBM) ballots to all registered voters for the November 2020 General Election.

Tab Label	Description
<a href="#">Introduction</a>	Current Tab
<a href="#">Cost Summary</a>	Summary of costs to mail a ballot to every registered voter for the November 2020 Election.
<a href="#">0. Global Assumptions</a>	Assumptions for a variety of areas within the Cost Model and are referenced where application. Note: Other tabs may have additional assumptions.
<a href="#">1. VBM Outbound</a>	Estimated costs associated with VBM Outbound operations.
<a href="#">2. Ballot Drop-off Boxes</a>	Estimated costs associated with VBM Ballot Drop-off Boxes.
<a href="#">3. VBM Inbound</a>	Estimated costs associated with VBM Inbound operations.
<a href="#">4. Outreach</a>	Estimated costs associated with voter outreach (marketing, communications, etc.).
<a href="#">5. Historical Data</a>	Historical data used to inform key assumptions.

**Legend**

	Modify data in YELLOW cells.
	Vendor cost categories.
	County Staff (including temp) cost categories.
	Supplies & Equipment cost categories.
	Space & Storage cost categories.
	Vote Centers cost categories.
	Content in WHITE cells are pre-populated with text, formulas or references to Global Assumptions.

**Document Data**

**Client:** Los Angeles County Registrar-Recorder/County Clerk

**Deliverable:** VBM Implementation Plan - Cost Analysis

**Engagement #:** #330051773

**Date:** April 24, 2020

**Version:** 7.1

**VBM Implementation Cost Summary**  
 April 24, 2020  
 Version 7.1

Cost Category	Estimate
<b>1. VBM Outbound Total:</b>	<b>\$ 8,572,346</b>
VBM Vendor (K&H)	\$ 7,658,653
Postage (USPS)	\$ 821,826
County Staff (Temp)	\$ 91,867
<b>2. Ballot Drop-Off Boxes Total:</b>	<b>\$ 1,379,536</b>
Supplies and Equipment	\$ 749,590
County Staff (Temp)	\$ 629,947
<b>3. VBM Inbound Total:</b>	<b>\$ 5,075,779</b>
Automated Signature Verification Vendor (ES&S)	\$ 202,364
Postage (USPS)	\$ 1,154,077
Supplies and Equipment	\$ 87,485
Space and Storage	\$ 1,055,197
County Staff (Temp & Contract)	\$ 2,576,656
<b>4. Outreach Total:</b>	<b>\$ 6,529,256</b>
<b>(A) Estimated Costs to Mail Ballot to All Registered Voters for November 2020 Election:</b>	<b>\$ 21,556,917</b>
<b>(B) Budgeted VBM Costs for November 2020 Election From Recommended 20/21 Budget:</b>	<b>\$ 7,868,622</b>
<b>% Change Relative to Budgeted VBM Costs ((A - B) / B):</b>	<b>174.0%</b>
<b>(C) Expected Revenue from Mailing Ballot to All Registered Voters for November 2020 Election:</b>	<b>\$ 4,937,970</b>
<b>(D) Expected VBM Revenue for November 2020 Election From Recommended 20/21 Budget:</b>	<b>\$ 1,809,783</b>
<b>(E) Projected Net County Cost Increase to Mail Ballot to All Registered Voters for November 2020 Election (A - B - C + D):</b>	<b>\$ 10,560,108</b>

Key Facts & Statistics	Historical	Projected / Used	Delta	% Change	
Registered Voters	5,513,057	5,723,104	210,047	3.8%	Historical = March 2020 Presidential Primary
Permanent Vote by Mail (PVBM) Voters	3,170,355	4,190,575	1,020,220	32.2%	Historical = March 2020 Presidential Primary
# of VBM Ballots Mailed	3,582,930	5,723,104	2,140,174	59.7%	Historical = March 2020 Presidential Primary
% of Voter Turnout (Presidential)	69.4%	74.0%	4.6%	6.6%	Historical = 2016 Presidential General
# of VBM Drop Box Facilities	206	382	176	85.2%	Historical = March 2020 Presidential Primary
% of Voter Turnout who Voted via VBM Ballot (Presidential)	53.8%	65.0%	11.2%	20.8%	Historical = March 2020 Presidential Primary
Number of VBM Ballots Returned	1,141,594	2,752,813	1,611,219	141.1%	Historical = March 2020 Presidential Primary
Number of Voters who Requested a VBM Ballot who Chose to Vote in Person	404,852	1,482,284	1,077,432	266.1%	Historical = March 2020 Presidential Primary
Inbound VBM Operations Square Footage	19,488	28,084	8,596	44.1%	Historical = March 2020 Presidential Primary

**0. Global Assumptions**

April 24, 2020

Version 7.1

Parameters	
Projected Number of Registered Voters	5,723,104
Number of Registered Voters for March 2020 Presidential Primary Election	5,513,057
% Contingency for Anticipated, New Registered Voters	0%
Projected Number of Registered Voters + Contingency	5,723,104
Projected Number of PVBM Voters	4,190,575
Number of PVBM Voters for March 2020 Presidential Primary Election	3,170,355
% of Registered Voters who are UOCAVA Voters	0.52%
Number of UOCAVA Voters	29,610
Number of First Time Voters Who Were Not Validated through VoteCal	26,700
% Voter Turnout	74.0%
Voter Turnout	4,235,097
% of Voter Turnout who Voted via VBM Ballot	65.0%
Number of Ballot Cards	3
Min. Number of Ballot Drop-off Boxes	382
Scenario 1 (Full Adoption of VCA): Min. Number of Vote Centers E-10	114
Scenario 1 (Full Adoption of VCA): Min. Number of Vote Centers E-3	572
Scenario 2 (No Change in Vote Center Ratio from March 2020): Min. Number of Vote Centers E-10	191
Scenario 2 (No Change in Vote Center Ratio from March 2020): Min. Number of Vote Centers E-3	763

Notes
Average 3.81% increase in registered voters from the Presidential Primary to the General Election for the last 3 elections (2008 = 2.08% increase in registered voters from the Primary to General; 2012 = 3.23% increase in registered voters from the Primary to General; 2016 = 6.11% increase in registered voters from the Primary to General)
Number of registered voters as of the March 2020 Presidential Primary Election
Data point - County of Sacramento - expect E-88 numbers to grow an additional 25k (to 865,000 RV; 2.98% increase) by the time it sends over the initial voter file to its ballot printer around E-54, and by an additional 10,000 (to 875,000 RV; 1.16% increase) around E-40 when it sends its supplemental voter file over.
Average 32.18% increase in PVBM voters from the Presidential Primary to the General Election for the last 2 elections (2012 = 40.22% increase in PVBM voters from the Primary to General; 2016 = 24.14% increase in PVBM voters from the Primary to General)
Assume 0.52% ratio of UOCAVA Voters to Registered Voters based on the average of the last 3 Presidential General elections (2008 = 0.54%; 2012= 0.49%; 2016 = 0.53%).
Number of UOCAVA Voters based on the ratio of UOCAVA Voters to Registered Voters in Cell C10 multiplied by the Projected Number of Registered Voters in Cell C7.
Estimate provided by RR/CC IT. HAVA count for March 2020 = 23,242, and assume a ~3500 increase based on trend.
Average % Voter Turnout based on the last 3 Presidential General elections (2008 = 81.92%; 2012= 70.46%; 2016 = 69.45%). Additional data points: (1) County of Sacramento - projecting a 74% turnout based on the last Presidential General. (2) Orange County - estimating turnout between 72% to 74%.
Voter turnout based on projected number of Registered Voters in Cell C7
An increase of 21.87% from the 2020 Presidential Primary based on the average increase from the 2016 Presidential General (36.22%) to 2018 General (44.66%) to 2020 Presidential Primary (53.79%). As an additional data point, the County of Sacramento had 93% of voter turnout who voted by VBM ballot for the 2020 Presidential Primary.
Per SB450, minimum of 1 ballot drop-off location per 15,000 Registered Voter.
Per SB 450, at least one Vote Center is provided for every 50,000 registered voter.
Per SB 450, at least one Vote Center is provided for every 10,000 registered voter.
Per SB 450, at least one Vote Center is provided for every 30,000 registered voter.
Per SB 450, at least one Vote Center is provided for every 7,500 registered voter.

Parameters	
Scenario 3 (Executive Order - Reduced # of Vote Centers & Reduced Voting Period): Min. Number of Vote Centers E-3	572
Cost per Vote Center Facility and Rentals	\$ 2,556.00
<b>County Staff (Temp and Contractors)</b>	
Clerk, NC	\$ 27.56
Election Assistant III, NC	\$ 44.01
Election Assistant II, NC	\$ 34.32
Election Assistant I, NC	\$ 28.89
Contract Staff	\$ 22.60
<b>K&amp;H: Outgoing VBM Election Mailing Services</b>	
% Spoilage	11%
% Tax	9.5%
Ballot Size	8.5 x 14
Outer Envelope	\$ 0.07
Return Envelope (Standard)	\$ 0.066
"I Voted" Sticker	\$ 0.05
Ballot Insert Wrap	\$ 0.14
Military Insert (Full Sheet - 8 1/2" x 11" - 1 sided)	\$ 0.077
HAVA Insert (All languages 1pprox. 4.25x8.25 full color - 2 sided)	\$ 0.088
Sample Ballot Books (Provided to K&H)	
Insertion of Book into VBM Packet	\$ 0.08
Per Booklet Version Provided	\$ 100.00
Ballot Cards (price per ballot card)	\$ 0.183
Machine Mail Assembly (assemble single VBM packet)	\$ 0.31
Subsequents (fee for each package after E-29 drop)	\$ 0.10
Hand Assembly (as needed, used in place of machine assembly fee)	\$ 0.50
Roundtrip Tracking (variable IMB, data collection, and upload)	\$ 0.03

Notes
Assume voting period shortened to 4 days (E-3 to Election Day). Further assume the number of Vote Centers determined per SB 450 (at least one Vote Center is provided for every 10,000 registered voter).
Provided by RR/CC for informational purposes only; no costs are derived from this figure in this Cost Model. <b>Note:</b> The estimate is based on an approx. cost paid for Vote Center facilities and rentals. It <b>does not</b> include operational cost such as staffing, deployment, supplies, etc.
S&EB rate based on CEO's FY 20/21 S&EB Cost Analysis.
S&EB rate based on CEO's FY 20/21 S&EB Cost Analysis.
S&EB rate based on CEO's FY 20/21 S&EB Cost Analysis.
S&EB rate based on CEO's FY 20/21 S&EB Cost Analysis.
Based on the average hourly rate from 3 contract agencies previously used in March 2020.
K&H pricing (\$) is on a per unit basis and includes shipping, handling and all applicable taxes unless otherwise stated in the SOW. Pricing applies to all material orders.
Applicable to Outer Envelopes, Return Envelopes, "I Voted" Stickers. Spoilage examples = ink issues, paper jams, audit samples, etc.
Taxable products: ballot printing, ballot wrap, inserts, envelopes, stickers
<b>Dropdown.</b> K&H per unit cost based on Ballot Size selection: 8.5" x 14" or 10.5" x 17"
Value will change based on Ballot Size in Cell C36
Unit cost dependent on Ballot Size in Cell C36
Cost for ballot wrap is tiered pricing. Value will change based on the number of Ballot Cards in Cell 19
Pricing is not dependent on ballot size
Pricing is not dependent on ballot size
Unit cost dependent on Ballot Size (cell C36)

**1. VBM Outbound**  
 April 24, 2020  
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Cost Category	Estimate
<b>1. VBM Outbound</b>	
<b>Vendor</b>	
<b>Outer Envelope</b>	
Number of Outer Envelopes	5,723,104
Number of Additional Outer Envelopes (Spoilage)	629,541
Cost per Outer Envelope	\$ 0.07
<b>Outer Envelope Total:</b>	<b>\$ 444,685.22</b>
<b>Return Envelope (Standard)</b>	
Number of Return Envelopes	5,723,104
Number of Additional Return Envelopes (Spoilage)	629,541
Cost per Return Envelope	\$ 0.066
<b>Return Envelope Total:</b>	<b>\$ 419,274.63</b>
<b>"I Voted" Sticker</b>	
Number of "I Voted" Stickers	5,723,104
Number of Additional "I Voted" Stickers (Spoilage)	629,541
Cost per "I Voted" Sticker	\$ 0.05
<b>"I Voted" Sticker Total:</b>	<b>\$ 317,632.30</b>
<b>Ballot Insert Wrap</b>	
Number of Ballot Insert Wraps	5,723,104
Cost per Ballot Insert Wrap	\$ 0.14
<b>Ballot Insert Wrap Total:</b>	<b>\$ 801,234.63</b>
<b>Military Insert</b>	
Number of Military Inserts	29,610
Cost per Military Insert	\$ 0.077
<b>Military Insert Total:</b>	<b>\$ 2,279.99</b>
<b>HAVA Insert</b>	
Number of First Time Voters Who Were Not Validated through VoteCal	26,700
Cost per HAVA Insert	\$ 0.088
<b>HAVA Insert Total:</b>	<b>\$ 2,349.60</b>
<b>Sample Ballot Books (Provided to K&amp;H)</b>	
Number of Sample Ballot Books to be Inserted in VBM Packet	0
Cost per Insertion of Sample Ballot Book in VBM Packet	\$ 0.08
Number of Booklet Versions	0
Cost per Booklet Version	\$ 100.00
<b>Sample Ballot Books Total:</b>	<b>\$ -</b>

Assumption
One Outer Envelope per Registered Voter + Contingency. Additional 11% towards spoiled Outer Envelopes. 8 1/2" x 14" ballot size
One Return Envelope per Registered Voter + Contingency. Additional 11% towards spoiled Return Envelopes. 8 1/2" x 14" ballot size
One "I Voted" Sticker per Registered Voter + Contingency. Additional 11% towards spoiled "I Voted" Stickers. Cost per "I Voted" Sticker is \$0.05 regardless of ballot size
One Ballot Insert Wrap per Registered Voter + Contingency. 3 cards per VBM ballot; 8 1/2" x 14" ballot size
One full sheet per UOCAVA voter. Pricing is not dependent on ballot size
HAVA insert provided to voters who need to provide ID for a Federal Election
Assume Sample Ballot Books will be mailed separately for the Nov 2020 General Election
Assume Sample Ballot Books will be mailed separately for the Nov 2020 General Election

Cost Category		Estimate	Assumption
<b>Ballot Cards</b>			
Number of Registered Voters		5,723,104	Number of Registered Voters + Contingency.
Number of Cards per VBM Ballot		3	Between 2 to 3 ballot cards based on the March 2020 Primary and 2018 General Elections
Cost per Ballot Card	\$	0.183	
<b>Ballot Card Total:</b>		<b>\$ 3,141,984.35</b>	
<b>Machine Mail Assembly</b>			
Number of VBM Packets to be Assembled		5,723,104	One VBM Packet per Registered Voter + Contingency.
Cost to Assemble each VBM Packet	\$	0.31	
<b>Machine Mail Assembly Total:</b>		<b>\$ 1,774,162.39</b>	
<b>Subsequents</b>			
Number of VBM Packets After E-29 Drop		147,084	Assume 2.57% of VBM Packets issued will receive a 2nd ballot request. 90k 2nd ballot requests in March (unrelated to NPP crossover requests; balance of removing party-based 2nd ballot requests with the expected increase in bad address data for all non-PVBM voter files), which is 2.57% of VBM Packets issued (~3.5M). 2nd ballot issuance originates from either: (1) Voter calls in / emails; (2) RR/CC receives the original returned VBM packet with a new LA County address; (3) Voter re-registers through online registration (an address/language/party change) after the original packet has been printed. As an additional point of reference, 2018 General = ~36k out of 2.7M (1.33%) and 2016 General = ~41k out of 2.4M (1.71%). Per K&H, other States that are currently 100% VBM ran an average of approx. 2% thus ~3% for Los Angeles County is a good number. Data point: (1) Orange County - 68,476 supplemental packets after initial mailing. Total registration approaching 1.7M, thus supplemental volume was approx. 4% of total registered voters.
Cost per VBM Packet After E-29 Drop		0.10	
<b>Subsequents Total:</b>		<b>\$ 14,708.38</b>	
<b>Hand Assembly</b>			
Number of Second Ballots Issued in a Multi-Language		4,000	Between 1k - 2k second ballots issued in November 2016 and 2018 elections; assume double.
Number of VBM Packets to be Hand Assembled		151,084	Number of Subsequents plus estimated number of second ballots issued in a multi-language
Cost to Hand Assemble each VBM Packet		0.50	As needed; used in place of Machine Assembly Fee. For subsequent or for mass (additional language needs)
<b>Hand Assembly Total:</b>		<b>\$ 75,541.89</b>	
<b>Roundtrip Tracking</b>			
Number of VBM Packets		5,870,188	One VBM packet per Registered Voter (info given to Ballot Trax) + Contingency.
Cost per VBM Packet		0.03	
<b>Roundtrip Tracking Total:</b>		<b>\$ 176,105.65</b>	
<b>K&amp;H Tax</b>		<b>\$ 488,694.16</b>	Taxable products: ballot printing, ballot wrap, inserts, envelopes, stickers
<b>Vendor Subtotal:</b>		<b>\$ 7,658,653.18</b>	

Cost Category		Estimate	Assumption
<b>Supplies and Equipment</b>			
<b>Outgoing VBM Postage</b>			
Number of VBM Packets Mailed		5,870,188	Based on the number of VBM Packets Assembles (reference cell B54) and Number of Subsequents (reference cell B58)
Postage Cost per VBM Packet		\$0.14	Average of \$0.14 assuming mass mailing volume at a rate of \$0.112 per packet and subsequent mailing volume at a rate of \$1.00 per packet. Per K&H: Main mail drop will be at a rate of \$0.112 per packet. The rate will then be higher on the supplemental drops, with some being as high as a dollar or more as approach E-7.
<b>Outgoing VBM Postage Total:</b>		<b>821,826</b>	
<b>Supplies and Equipment Subtotal: \$</b>		<b>821,826.36</b>	
<b>County Staff (Includes Temp Staff)</b>			
<b>Manual VBM Applications</b>			
Number of Manual VBM Applications		100,000	Due to new voters, change of address, suspend & reissue (due to undeliverable with a change of address within LA County), etc.
Rate / Hour		30	~20k+ suspend & reissue in March 2020 and ~28k change of address at the Polls.
Number of Hours Needed		3,333	
Number of Staff		26	
Number of Hours per Staff per Day		7	
Number of Days		18	E-29 through E-6. Mon-Fri.
Hourly Rate per Staff		\$ 27.56	Clerk, NCs
<b>Manual VBM Applications Total: \$</b>		<b>91,866.67</b>	
<b>County Staff Subtotal: \$</b>		<b>91,866.67</b>	
<b>1. VBM Outbound Total:</b>		<b>\$ 8,572,346.21</b>	

**2. Ballot Drop-off Boxes**

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Cost Category		Estimate	Assumption
<b>2. Ballot Drop-Off Boxes</b>			
<b>Supplies and Equipment</b>			
<b>Drills</b>			
Drills (Installation)		4	Total drills required
Cost per Drill		\$ 245.88	
	<b>Drills Total:</b>	<b>\$ 983.52</b>	
<b>Drill Bits</b>			
Drill Bits (Installation)		50	Total drill bits required
Cost per Drill Bits		\$ 18.50	
	<b>Drill Bits Total:</b>	<b>\$ 925.00</b>	
<b>VBM Van Rental</b>			
Number of VBM Vans		15	Average 7 stops / route; approx. 25 routes
Weekly Rate per VBM Van Rental		\$ 400.00	
Number of Weeks VBM Vans Needed		5	
	<b>VBM Van Rental Total:</b>	<b>\$ 30,000.00</b>	
<b>Ballot Drop-off Boxes</b>			
Number of Ballot Drop-off Boxes Est. for Nov 2020		382	
Number of Ballot Drop-off Boxes Previously Procured		110	10 Large and 100 Medium Ballot Drop-off Boxes previously procured for March 2020 Election
Number of Additional Ballot Drop-off Boxes (Medium Size)		272	
Cost per Ballot Drop-off Box		\$ 2,643.00	Includes cost per M910 Stainless Ballot and freight cost. Source: ascabr (ballot drop-off box vendor)
	<b>Ballot Drop-off Box Total:</b>	<b>\$ 717,681.01</b>	
	<b>Supplies and Equipment Subtotal:</b>	<b>\$ 749,589.53</b>	
<b>County Staff (Includes Temp Staff)</b>			
<b>Location Recruitment</b>			
Number of Location Recruitment Staff		7	
Number of Days (VBM Account Managers)		90	
Number of Hours per Day		8	
Hourly Rate		\$ 34.32	EA II Classification
	<b>VBM Account Managers Subtotal:</b>	<b>\$ 172,972.80</b>	
Number of VBM 24-Hour Box Field Assessment Workers		8	
Number of Days (VBM 24-Hour Box Field Assessment Workers)		45	
Number of Hours per Day		8	
Hourly Rate		\$ 34.32	EA II Classification
	<b>VBM Account Managers Subtotal:</b>	<b>\$ 98,841.60</b>	
	<b>Location Recruitment Total:</b>	<b>\$ 271,814.40</b>	
<b>Installation</b>			
Number of Ballot Drop-off Boxes Est. for Nov 2020		382	
Number of Ballot Drop-off Boxes Previously Installed		36	1 Large and 35 Medium Ballot Drop-off Boxes already installed



Cost Category	Estimate	Assumption
Number of Net New Ballot Drop-off Boxes to be Installed	346	Assume all VBM Ballot Drop-off Boxes will be 24-hour, external.
Number of Hours per Installation	4	
Hourly Rate per Installation Team (2 People)	\$ 55.86	
<b>County Staff (Installation) Total:</b>	<b>\$ 77,207.52</b>	
<b>Assessment</b>		
Number of Ballot Drop-off Boxes Est. for Nov 2020	382	
Number of Field Reps (Accessibility Surveyor) per Assessment	2	
Number of Hours per Assessment	4	
Hourly Rate per Field Rep	\$ 25.40	
<b>County Staff (Assessment) Total:</b>	<b>\$ 77,528.99</b>	
<b>Ballot Collection - Truck Drivers</b>		
Number of Truck Drivers per Day	2	Timeline accounts for vans being picked up, labeled, refueled, returned, etc. EA II Classification
Number of Hours per Truck Driver per Day	8	
Number of Days	32	
Hourly Rate per Truck Driver	\$ 34.32	
<b>County Truck Drivers (Ballot Collection) Total:</b>	<b>\$ 17,571.84</b>	
<b>Election Day - Truck Drivers (Additional)</b>		
Number of Truck Drivers	400	Teams of 2 EA II Classification
Number of Hours per Truck Driver	8	
Hourly Rate per Truck Driver	\$ 34.32	
<b>County Election Day Truck Drivers Total:</b>	<b>\$ 109,824.00</b>	
<b>Election Day - Loading Assistants</b>		
Number of Loading Assistants	190	
Stipend per Loading Assistant	\$ 400.00	
<b>Loading Assistants (Contract Staff) Total:</b>	<b>\$ 76,000.00</b>	
<b>County Staff Subtotal:</b>	<b>\$ 629,946.75</b>	
<b>2. Ballot Drop-Off Boxes Total:</b>	<b>\$ 1,379,536.28</b>	

**3. VBM Inbound**

April 24, 2020

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Cost Category	Estimate
<b>3. VBM Inbound</b>	
<b>Supplies and Equipment</b>	
<b>Ballot Security Envelopes</b>	
Number of Vote Centers (E-10)	191
Number of Vote Centers (E-3)	763
Number of Ballot Security Envelopes (BSEs) per VC per Day	6
Cost per BSE	\$ 1.19
<b>Ballot Security Envelopes Total:</b>	<b>\$ 36,776.67</b>
<b>Replacement Envelopes</b>	
Number of Replacement Envelopes per Vote Center	40
Number of Vote Centers (E-3)	763
Cost per Replacement Envelope	\$ 0.15
<b>Replacement Envelopes Total:</b>	<b>\$ 4,578.48</b>
<b>Envelopes for Surrendered VBM Ballots (Scenario 1)</b>	
Number of Vote Centers (E-10)	191
Number of Vote Centers (E-3)	763
Number of Envelopes per VC per Day	1
Cost per Envelope for Surrendered VBM Ballots	\$ 1.19
<b>Envelopes for Surrendered VBM Ballots Total:</b>	<b>\$ 6,129.44</b>
<b>Business Reply Mail (USPS Postage)</b>	
Estimated Voter Turnout	4,235,097
% of Voter Turnout who Voted via VBM Ballot	65%
Number of Returned VBM Ballots	2,752,813
% of Returned VBM Ballots via USPS	69.2%
USPS Postage per Returned VBM Ballot (Business Reply Mail)	\$ 0.606
<b>BRM Cost Total:</b>	<b>\$ 1,154,076.77</b>
<b>Signature Verification</b>	
Estimated Voter Turnout	4,235,097
% of Voter Turnout who Voted via VBM Ballot	65%
Number of Returned VBM Ballots	2,752,813
Cost per VBM Ballot for Signature Verification (50,000-200,000 ballots)	\$ 0.173
Cost per VBM Ballot for Signature Verification (200,001-500,000 ballots)	\$ 0.127
Cost per VBM Ballot for Signature Verification (500,001-1M ballots)	\$ 0.092
Cost per VBM Ballot for Signature Verification (1,000,001 - 1.5M ballots)	\$ 0.081
Cost per VBM Ballot for Signature Verification (1,500,001 - 2M ballots)	\$ 0.046
Cost per VBM Ballot for Signature Verification (2M+ ballots)	\$ 0.023
Signature Verification (ASR Machine) Volume Cost (50,000-200,000 ballots)	\$ 25,950.00
Signature Verification (ASR Machine) Volume Cost (200,001-500,000 ballots)	\$ 38,099.87
Signature Verification (ASR Machine) Volume Cost (500,001-1M ballots)	\$ 45,999.91
Signature Verification (ASR Machine) Volume Cost (1,000,001 - 1.5M ballots)	\$ 40,499.92
Signature Verification (ASR Machine) Volume Cost (1,500,001 - 2M ballots)	\$ 22,999.95

Assumption
Assumes the greatest number of Vote Centers across the multiple scenarios.
4 sets of 10 envelopes
Assumes the greatest number of Vote Centers across the multiple scenarios.
Assumes the greatest number of Vote Centers across the multiple scenarios.
Assumes the greatest number of Vote Centers across the multiple scenarios.
Approx. 70% of VBM Ballots were returned via USPS for the March 2020 Presidential Primary (See Historical Data tab)
Based on the average BRM postage cost from the March 2020 Presidential Primary Election
ES&S's per unit cost based on volume band 50,000-200,000
ES&S's per unit cost based on volume band 200,001-500,000
ES&S's per unit cost based on volume band 500,001-1,000,000
ES&S's per unit cost based on volume band 1,000,001 - 1,500,000
ES&S's per unit cost based on volume band 1,500,001 - 2,000,000
ES&S's per unit cost based on volume band 2,000,001+

Cost Category	Estimate
Signature Verification (ASR Machine) Volume Cost (2M+ ballots)	\$ 17,314.70
Signature Verification (ASR Machine) - Upfront Fee	\$ 11,500.00
<b>Signature Verification (Volume + Upfront Fee) Total:</b>	<b>\$ 202,364.36</b>
<b>Machine Envelope Opener</b>	
Number of Machine Openers	1
Cost per Machine Opener	\$ 40,000.00
<b>Machine Envelope Opener Total:</b>	<b>\$ 40,000.00</b>
<b>Supplies and Equipment Subtotal:</b>	<b>\$ 1,443,925.72</b>
<b>Space and Storage</b>	
<b>VBM Inbound Facility</b>	
Square Footage	28,084
Cost per Square Foot	\$ 1.505
Duration (in Months)	12
<b>VBM Inbound Facility Total:</b>	<b>\$ 507,197.04</b>
<b>TOC Storage Shelves - VBM Ballot Cards</b>	
Max. Number of VBM Ballot Boxes (Current Capacity)	7,492
Max. Number of Ballot Cards per VBM Ballot Box (Current Capacity)	1,000
Total Ballot Cards Stored (Current Capacity)	7,492,000
Estimated Voter Turnout	4,235,097
% of Returned VBM Ballots	65%
Max. Ballot Cards Anticipated for November 2020	8,258,440
Additional Capacity Needs	766,440
Cost for Additional Capacity	\$ 135,000.00
<b>Additional TOC Shelves Total:</b>	<b>\$ 135,000.00</b>

Assumption
Assumes use of current 4 ASR machines. The RR/CC is considering increasing by 2 additional machines, however not yet finalized.
Assume an additional machine opener is needed. Staff manually extract the ballots. Current operations use 10 OPEX machines to open and 1 machine opener. Machine letter opener opens 100 envelopes/2min; OPEX machine opens 100 envelopes/4.3minutes
Increase of 44.11% from current space (3rd Floor at RR/CC HQ= 19,488 sq ft). Estimate provided by CEO research, assuming the average cost psf and average cost of taxes & operation expenses. Research parameters were a 10 mile radius of RRCC headquarters in Norwalk. The estimated rental costs are between \$.80 and \$1.20 psf on a triple net basis with the average currently being \$1.13 psf. Warehouse space is typically quoted on a triple net basis. Triple net means that this does not include the cost of taxes and operating expenses, which can add another \$.25 to \$.50 psf. Costs are based on the age of the building, condition, size, features, location and amount of maintenance required.
Assume space will be needed for a full year
3 ballot cards per returned VBM Ballot
Additional capacity would require removal of existing shelves and installation of new shelves on raised foundation with sub-floor wiring and resolving asbestos issues

Cost Category	Estimate	Assumption
<b>EOC Storage Area - Pallets</b>		
Max. Number of Pallets (Current Capacity)	1,260	Post tally, and should include the 60 pallets for other election waste from inbound VBM operations.
Max. Number of Boxes per Pallet (Current Capacity)	54	
Max. Number of Ballot Cards per VBM Ballot Box (Current Capacity)	1,000	
Total Ballot Cards Stored (Current Capacity)	68,040,000	
Buildout of Additional Shelves at EOC for VBM Ballot Pallet Storage	\$ 295,000.00	
Mark-up	40%	Assumes markup for Smartmatic to secure subcontractor.
<b>Additional EOC Shelves Total:</b>	<b>\$ 413,000.00</b>	
<b>Space and Storage Subtotal:</b>	<b>\$ 1,055,197.04</b>	
<b>County Staff (Includes Temp Staff)</b>		
<b>Counter (RR/CC HQ)</b>		
Number of Staff	15	E-29 through E+24. Mon-Fri plus E-10 (10/24), E-9 (10/25), E-3 (10/31), and E-2 (11/1) Clerk, NCs
Number of Hours per Staff per Day	8	
Number of Days	44	
Hourly Rate per Staff	\$ 27.56	
<b>Counter (RR/CC HQ) Total:</b>	<b>\$ 145,516.80</b>	
<b>Drivers</b>		
Number of Staff	6	E-36 through E+24. Mon-Fri plus E-10 (10/24) and E-3 (10/31). EA II Classification
Number of Hours per Staff per Day	8	
Number of Days	52	
Hourly Rate per Staff	\$ 34.32	
<b>Drivers Total:</b>	<b>\$ 85,662.72</b>	
<b>VBM Drop Box Processing</b>		
Number of Staff	4	E-29 through E+3. Mon-Fri. Clerk, NCs
Number of Hours per Staff per Day	6	
Number of Days	25	
Hourly Rate per Staff	\$ 27.56	
<b>VBM Drop Box Processing Total:</b>	<b>\$ 16,536.00</b>	
<b>Mail / BSE Sorting</b>		
Number of Staff	20	E-29 through E-11 = Mon-Fri. E-10 through E+10 = Every Day Clerk, NCs
Number of Hours per Staff per Day	7	
Number of Days	36	
Hourly Rate per Staff	\$ 27.56	
<b>Mail / BSE Sorting Total:</b>	<b>\$ 138,902.40</b>	
<b>ASR Machine Processing</b>		
Number of Staff	22	Assumes 6 ASR machines. 2 people / machine, plus a catcher and report writers. E-29 through E-11 = Mon-Fri. E-10 through E+15 = Every Day Clerk, NCs
Number of Hours per Staff per Day	7	
Number of Days	41	
Hourly Rate per Staff	\$ 27.56	
<b>ASR Machine Processing Total:</b>	<b>\$ 174,013.84</b>	

Cost Category	Estimate	Assumption
<b>Cure Letter Processing</b>		
Number of Staff	8	Had 6 in march.
Number of Hours per Staff per Day	8	
Number of Days	49	
Hourly Rate per Staff	\$ 27.56	
<b>Cure Letter Processing Total:</b>	<b>\$ 86,428.16</b>	E-29 through E-11 = Mon-Fri. E-10 through E+15 = Every Day. E+16 through E+27 = Mon-Fri. Clerk, NCs
<b>Prepping Ballots for Tally Transport</b>		
Number of Staff	6	Starting at E-15 through E+17. Mon-Fri. Clerk, NCs
Number of Hours per Staff per Day	8	
Number of Days	25	
Hourly Rate per Staff	\$ 27.56	
<b>Prepping Ballots for Tally Transport Total:</b>	<b>\$ 33,072.00</b>	
<b>Extractions</b>		
Estimated Voter Turnout	4,235,097	E-14 through E+16. Every day. Assumes shifts are staggered and no overtime needed. Data point: (1) Orange County - Cleared all mail for Tally on Monday before Election by working 24-hour shifts.  Clerk, NCs
% of Returned VBM Ballots	65%	
Number of Returned VBM Ballots	2,752,813	
Rate / Hour	70	
Number of Hours Needed	39,326	
Number of Staff	159	
Number of Hours per Staff per Day	8	
Number of Days	31	
Hourly Rate per Staff	\$ 27.56	
<b>Prepping Ballots for Tally Transport Total:</b>	<b>\$ 1,083,821.90</b>	
<b>Exception Reports</b>		
Estimated Voter Turnout	4,235,097	Assumes 1 Exception Report per 200 Returned VBM Ballot  Number of staff dependent on duration and volume.  E-29 through E+17 (Nov 20). Mon-Fri. Clerk, NCs
% of Returned VBM Ballots	65%	
Number of Returned VBM Ballots	2,752,813	
Number of Exception Reports per Returned VBM Ballot	200	
Number of Exception Reports	13,764	
Rate / Hour	8	
Number of Hours Needed	1,721	
Number of Staff	6	
Number of Hours per Staff per Day	8	
Number of Days	35	
Hourly Rate per Staff	\$ 27.56	
<b>Prepping Ballots for Tally Transport Total:</b>	<b>\$ 47,417.21</b>	

Cost Category	Estimate	Assumption
<b>Manual Signature Verification (Challenges)</b>		
Estimated Voter Turnout	4,235,097	
% of Returned VBM Ballots	65%	
Number of Returned VBM Ballots	2,752,813	
% of Returned VBM Ballots Requiring Manual Signature Verification	45%	
Number of VBM Ballots Requiring Manual Signature Verification	1,238,766	
Rate / Hour	1,000	
Number of Hours Needed	1,239	
Number of Staff	5	Number of staff dependent on duration and volume.
Number of Hours per Staff per Day	7	
Number of Days	35	E-29 through E+17 (Nov 20). Mon-Fri.
Hourly Rate per Staff	\$ 27.56	Clerk, NCs
<b>Manual Signature Verification (Challenges) Total:</b>	<b>\$ 34,140.39</b>	
<b>Tally Operations - IT Operation Lead</b>		
Number of Staff	1	
Number of Hours per IT Operation Lead per Day	8	
Number of Days (Plus Overtime)	67.5	9/1 - 11/27. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT).
Hourly Rate per Staff	\$ 44.01	EA III, NCs
<b>IT Operation Lead Total:</b>	<b>\$ 23,765.40</b>	
<b>Tally Operations - Operation Lead</b>		
Number of Staff	1	
Number of Hours per Operation Lead per Day	8	
Number of Days (Plus Overtime)	67.5	9/1 - 11/27. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT).
Hourly Rate per Staff	\$ 34.32	EA II, NCs
<b>Operation Lead Total:</b>	<b>\$ 18,532.80</b>	
<b>Tally Operations - Scanner Operators</b>		
Number of Staff	24	
Number of Hours per Scanner Operator per Day	8	
Number of Days (Plus Overtime)	28.5	10/22 - 11/20. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT).
Hourly Rate per Staff	\$ 34.32	EA II, NCs
<b>Scanner Operators Total:</b>	<b>\$ 187,799.04</b>	
<b>Tally Operations - Election Prep, Ballot Removal/Relocation, L&amp;A</b>		
Number of Staff	14	
Number of Hours per Staff per Day	8	
Number of Days (Plus Overtime)	67.5	9/1 - 11/27. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT).
Hourly Rate per Staff	\$ 28.89	EA I, NCs
<b>Election Prep, Ballot Removal/Relocation, L&amp;A Total:</b>	<b>\$ 218,408.40</b>	

Cost Category		Estimate	Assumption
<b>Tally Operations - Tally Output Staff</b>			
Number of Staff		24	
Number of Hours per Staff per Day		8	
Number of Days (Plus Overtime)		26.5	
Hourly Rate per Staff		\$ 22.60	10/23 - 11/19. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT). Contract
<b>Tally Output Staff Total:</b>		<b>\$ 114,971.84</b>	
<b>Tally Operations - Ballot Input Handlers</b>			
Number of Staff		12	
Number of Hours per Staff per Day		8	
Number of Days (Plus Overtime)		26.5	
Hourly Rate per Staff		\$ 22.60	10/23 - 11/19. Need 1 weekend before and 1 weekend after Election Day = Overtime. Plus 8 hours Election Night (OT). Contract
<b>Ballot Input Handlers Total:</b>		<b>\$ 57,485.92</b>	
<b>Tally Operations - Snag Clerks</b>			
Number of Staff		18	
Number of Hours per Staff per Day		8	
Number of Days (Plus Overtime)		26.5	
Hourly Rate per Staff		\$ 22.60	10/23 - 11/19. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT). Contract
<b>Snag Clerks Total:</b>		<b>\$ 86,228.88</b>	
<b>Tally Operations - Box Tracking</b>			
Number of Staff		1	
Number of Hours per Staff per Day		8	
Number of Days (Plus Overtime)		26.5	
Hourly Rate per Staff		\$ 22.60	10/23 - 11/19. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT). Contract
<b>Box Tracking Total:</b>		<b>\$ 4,790.49</b>	
<b>Tally Operations - Box Transporter</b>			
Number of Staff		4	
Number of Hours per Staff per Day		8	
Number of Days (Plus Overtime)		27	
Hourly Rate per Staff		\$ 22.60	10/23 - 11/19. Mon-Friday, plus 1 weekend before E (OT) plus 1 weekend after E (OT) plus an additional 8 hours Election Night (OT). Contract
<b>Box Transporter Total:</b>		<b>\$ 19,161.97</b>	
<b>County Staff Subtotal:</b>		<b>\$ 2,576,656.17</b>	
<b>3. VBM Inbound Total:</b>		<b>\$ 5,075,778.93</b>	

**4. Outreach**  
 April 24, 2020  
 Version 7.1

Cost Category	Estimate
<b>4. Outreach</b>	
<b>Postage</b>	
Number of Mailings	2
Outgoing Postage	\$ 621,600.00
Return Postage	\$ 1,960,000.00
<b>Postage Total:</b>	<b>\$ 5,163,200.00</b>
<b>Mailings</b>	
Number of Mailings	2
Mailings	\$ 683,027.99
<b>Mailings Total:</b>	<b>\$ 1,366,055.98</b>
<b>4. Outreach Total:</b>	<b>\$ 6,529,255.98</b>

Assumption
Assumes 8.5 x 14" size mailing. If the RR/CC decides to pursue 8.5 x 11", the cost would be reduced by \$167,699.25.



5. Historical Data  
April 24, 2020  
Version 7.1

Requested VBM Ballot, Then Surrendered to Vote at Polls (VAP)							
election_date	name	AV request	AV returned	% AV Returned (relative to Requested)	AV VAP	% Surrendered to VAP	Voted
3/3/2020	PRESIDENTIAL PRIMARY ELECTION	3,582,930	1,141,594	32%	404,852	11%	2,122,469
11/6/2018	GENERAL ELECTION	2,704,810	1,358,879	50%	353,265	13%	3,011,818
6/5/2018	STATEWIDE DIRECT PRIMARY ELECTION	2,321,276	670,965	29%	143,899	6%	1,499,972
11/8/2016	GENERAL ELECTION	2,420,613	1,306,928	54%	463,588	19%	3,567,857
6/7/2016	PRESIDENTIAL PRIMARY ELECTION	1,925,246	732,955	38%	253,959	13%	2,087,591
11/4/2014	GENERAL ELECTION	1,616,818	585,317	36%	107,867	7%	1,541,878

March 2020 Presidential Primary: VBM Returns Distribution			
Return Source	Description	Ballots	% of Total
Drop Box	Permanent Boxes	4,038	0.35%
Drop Off Location	Drop Boxes that are supervised	50,027	4.30%
Vote Center Drop Off	VBM Ballots returned via BSEs	303,821	26.09%
Fax	Returned via Fax	1,062	0.09%
Mail	Returned via USPS	805,740	69.18%
		1,164,688	

HISTORICAL DATA (Provided by RR/CC in Apr 2020)																
Year	Election	Reg	% Change from Primary to General	PVBM	% of Reg Voters who are PVBM	One-Time VBM Request	Total # of Voters who Received a VBM Ballot (PVBM + One-Time)	% Change in One-Time VBM Requests	Ballots Cast	Poll	VBM	% VBM Ballots	Total Turnout	Voters Never Voted	UOCAVA Registration	UOCAVA as a % of Total Registered
1998	Gubernatorial Primary	3,772,593							1,450,126	1,164,594	285,532	19.69%	38.44%	61.56%		
1998	Gubernatorial General	3,854,826							2,058,862	1,651,086	407,776	19.81%	53.41%	46.59%		
2000	Presidential Primary	3,808,488							1,836,153	1,519,271	316,882	17.26%	48.21%	51.79%	972	0.03%
2000	Presidential General	4,075,037							2,769,927	2,226,784	543,143	19.61%	67.97%	32.03%	3,651	0.09%
2002	Gubernatorial Primary	4,142,514							1,070,651	851,675	218,976	20.45%	25.85%	74.15%	729	0.02%
2002	Gubernatorial General	3,962,831							1,784,320	1,424,638	359,682	20.16%	45.03%	54.97%	1,514	0.04%
2004	Presidential Primary	3,670,157							1,379,747	1,049,394	330,353	23.94%	37.59%	62.41%	1,990	0.05%
2004	Presidential General	3,901,106							3,085,582	2,383,889	701,693	22.74%	79.10%	20.90%	14,572	0.37%
2006	Gubernatorial Primary	3,826,979							1,050,076	735,252	314,824	29.98%	27.44%	72.56%	12,671	0.33%
2006	Gubernatorial General	3,899,397							2,033,119	1,501,736	531,383	26.14%	52.14%	47.86%	13,472	0.35%
2008	Presidential Primary	3,951,957							2,183,998	1,701,077	482,921	22.11%	55.26%	44.74%	13,570	0.34%
2008	June Primary	4,027,819							812,308	496,172	316,136	38.92%	20.17%	79.83%	13,733	0.34%
2008	Presidential General	4,111,642	2.08%						3,368,057	2,557,835	810,222	24.06%	81.92%	18.08%	22,111	0.54%
2010	Gubernatorial Primary	4,355,447		811,674	18.64%	135,296	946,970		1,021,448	651,949	369,499	36.17%	23.45%	76.55%	20,307	0.47%
2010	Gubernatorial General	4,421,019		1,080,400	24.44%	179,185	1,259,585	32.44%	2,377,105	1,698,454	678,651	28.55%	53.77%	46.23%	20,658	0.47%
2012	Presidential Primary	4,450,035		1,154,027	25.93%	53,119	1,207,146	-70.36%	973,274	541,463	431,811	44.37%	21.87%	78.13%	16,938	0.38%
2012	Presidential General	4,593,621	3.23%	1,618,226	35.23%	179,166	1,797,392	237.29%	3,236,704	2,260,876	975,828	30.15%	70.46%	29.54%	22,410	0.49%
2014	Gubernatorial Primary	4,823,407		1,552,321	32.18%	29,710	1,582,031	-83.42%	824,070	423,376	400,694	48.62%	17.08%	82.92%	20,922	0.43%
2014	Gubernatorial General	4,544,455		1,629,216	35.85%	44,746	1,673,962	50.61%	1,518,835	941,812	577,023	37.99%	33.42%	66.58%	19,919	0.44%
February 11, 2016	POINT IN TIME	4,848,454														
2016	Presidential Primary	4,809,383		1,975,909	41.08%	72,927	2,048,836	62.98%	2,006,976	1,284,949	722,027	35.98%	41.73%	58.27%	20,501	0.43%
July 11, 2016	POINT IN TIME	4,949,805														
2016	Presidential General	5,103,353	6.11%	2,452,857	48.06%	160,227	2,613,084	119.71%	3,544,115	2,260,467	1,283,648	36.22%	69.45%	30.55%	26,871	0.53%
July 17, 2017	POINT IN TIME	5,412,696														
February 6, 2018	POINT IN TIME	5,341,818														
April 14, 2018	POINT IN TIME	5,136,711														
2018	Statewide Direct Primary Election	5,140,129		2,285,763	44.47%	36,862	2,322,625	-76.99%	1,490,502	825,427	665,075	44.62%	29.00%	71.00%	24,271	0.47%
2018	General Election	5,200,514		2,600,128	50.00%	106,203	2,706,331	188.11%	3,023,417	1,673,104	1,350,313	44.66%	58.14%	41.86%	25,263	0.49%
March 1, 2019	POINT IN TIME	5,369,536														
April 18, 2019	POINT IN TIME	5,380,594														

May 28, 2019	POINT IN TIME	5,411,802														
August 7, 2019	POINT IN TIME	5,424,197														
October 9, 2019	POINT IN TIME	5,461,945														
October 16, 2019	POINT IN TIME	5,462,159														
October 21, 2019	POINT IN TIME	5,461,224														
October 31, 2019	POINT IN TIME	5,466,037														
January 13, 2020	POINT IN TIME	5,483,014														
January 20, 2020	POINT IN TIME	5,488,620														
February 20, 2020	POINT IN TIME	5,534,513														
2020	Presidential Primary	5,513,057	3,170,355	57.51%	412,575	3,582,930	288.48%	2,122,469	980,875	1,141,594	53.79%	38.50%	61.50%	25,518	0.46%	

average % change in One-Time VBM requests: 74.88%  
64.99%

Registered Voters (yellow cells are projections)	As of:	# of Weeks	Avg % Change Week-Over-Week
5,546,785	18-Feb-20		
5,580,416	25-Mar-20	5	0.12%
5,592,466	3-Apr-20	1	0.17%
5,600,575	12-Apr-20		0.145%
5,608,696	21-Apr-20		
5,616,829	30-Apr-20		
5,624,973	9-May-20		
5,633,129	18-May-20		
5,641,297	27-May-20		
5,649,477	5-Jun-20		
5,657,669	14-Jun-20		
5,665,872	23-Jun-20		
5,674,088	2-Jul-20		
5,682,315	11-Jul-20		
5,690,555	20-Jul-20		
5,698,806	29-Jul-20		
5,707,069	7-Aug-20		
5,715,345	16-Aug-20		
5,723,632	25-Aug-20	E-70	

avg WOW estimate

Sample Ballot (Jan 15, 2020)

Input Qty	NCOA Matches	NonUSPS	Sent in mail	Total Bad Addresses	Returned Undeliverable	Returned Change of Address	Total Undeliverables
5,190,557	90,731	45	5,099,781	269,137	159,900	18,461	178,361
							3.50%