



TABLE OF CONTENTS

1	INTRODUCTION	3
1.1	PURPOSE.....	3
1.2	RECOMMENDED MESSAGE PRIORITIES	3
2	DEFICIENT ERRORS.....	4
3	POTENTIAL MATCH MESSAGES.....	4
4	MERGE VOTER DETERMINE SURVIVOR.....	10
4.1	HOW TO DETERMINE THE SURVIVING VOTER RECORD	10
4.2	GENERAL STEPS FOR ANALYZING MERGE VOTER DETERMINE SURVIVOR	11
4.2.1	Scenario 1: Same Voter Registration Dates.....	12
4.2.2	Scenario 2: Voter Participation History.....	13
4.2.3	Scenario 3: Voter Activity History Transaction Log.....	13
5	RESOLVE UNIQUE IDENTIFIER (UID) MESSAGE	14
6	APPENDIX A.....	16
7	APPENDIX B.....	21



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 2 of 23

LIST OF TABLES

Table 1: Deficient Error Messages	4
Table 2: Potential Match Messages	5
Table 3: Voter Activity Log Transactions Impacting Merge Voter Determine Survivor	12
Table 4: Resolve UID Message.....	14
Table 5: VoteCal Messages to EMS.....	16
Table 6: Activity History Transaction Log Descriptions	21



1 Introduction

VoteCal messages to the Election Management System (EMS) are integral to the VoteCal system. Messages provide counties information on voter registration and list maintenance activities. There are 54 messages VoteCal sends to the EMSs; 19 of the 54 messages require a response from the county EMS. It is essential that counties take action and reply to response required messages; some of the message types are automatically responded to by the EMS. If messages are ignored or deleted in the local county EMS, they remain in open status in VoteCal and continue to age until a response is received from the EMS.

1.1 Purpose

This document provides recommended steps for resolving the most common response required messages in VoteCal. Counties may contact their EMS vendor if additional training or information is needed to respond to messages.

Note: See the VoteCal DMV COA guidance document for additional information on DMV COA messages and business processes.

1.2 Recommended Message Priorities

This section provides recommendations on the order counties should work messages. It is very important to note that Potential Duplicate Match, Merge Voter Determine Survivor, and Resolve UID are interrelated messages and should be worked in the recommended order. First work the Potential Duplicate Match messages determining if a particular voter pair matches. Next work the MVDS messages. If VoteCal is unable to determine which of the matching voter records should be the survivor then VoteCal sends a Merge Voter Determine Survivor message to the county with the most recent registration date to identify the surviving voter. Finally, once potential match and MVDS messages are resolved the user can respond to the appropriate Resolve UID messages with, "Yes, same voter", or for voter records that are not a match; the user updates the voters' driver's license number or SSN4, as appropriate.

The following list represents SOS's current recommended priority order for working the most common VoteCal messages to the EMS. This recommended priority order may change as SOS collects more statistics on message processing.

1. Deficient Errors
2. Potential Duplicate Match
3. Merge Voter Determine Survivor
4. Potential DMV COA Match
5. Potential Deceased Match
6. Potential Deceased Match to Voter
7. Potential Felon Match
8. Potential Felon Match to Voter
9. NCOA Potential Address Change
10. Resolve Unique Identifier



2 Deficient Errors

VoteCal deficient errors indicate a voter registration record is incomplete or information is invalid. Deficient errors are not considered critical; VoteCal accepts a voter registration record with deficiencies as registered, and then sends a “Deficient Error” message to the local county EMS. Deficient errors require user intervention and a response to correct the deficiency. Table 1: Deficient Error Messages provides information on the types of deficiencies and recommended resolution steps.

Table 1: Deficient Error Messages

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
Deficient Error	<p>VoteCal allows voter records to come into the VoteCal database with missing or invalid “non-critical” data. The following data elements cause Deficient Error messages:</p> <ol style="list-style-type: none"> 1. SSN4 is populated but does not have the full 4 digits. 2. Voter Status Reason is missing or invalid. 3. Local Status Change Reason is missing. 4. Registration Method is missing or invalid. 5. Gender Code is invalid. 6. Political Party is invalid. 7. Mailing address is incomplete. 8. Precinct is missing. 	<p><u>County Action:</u> Correct the deficient record:</p> <ol style="list-style-type: none"> 1. Update record so that SSN4 has the full 4 digits. 2. Update record with valid Voter Status Reason. 3. Update record with Local Status Change Reason. 4. Update record with valid Registration Method. 5. Update record with valid Gender Code. 6. Update record with valid Political Party. 7. Update record with corrected mailing address. 8. Update record with precinct. 9. Following EMS guidance, respond to the message. <p>A voter update is sent to VoteCal and the deficient error message is cleared.</p> <p><u>VoteCal Action:</u> Update the voter record with the correction.</p>

3 Potential Match Messages

VoteCal provides several match services to assist counties with list maintenance activities. When VoteCal finds a possible duplicate, deceased or felon record, or new address match for an existing voter, VoteCal sends a potential match message to the county. These messages require user intervention to determine whether or not the records match. Table 2: Potential Match Messages lists the most common potential match messages, provides information about the message and lists recommended steps to determine the validity of the match. All potential match messages require a response; if a response is not received the message remains open and continues to age in VoteCal.



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 5 of 23

Table 2: Potential Match Messages

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
<p>Potential Duplicate Match</p>	<p>VoteCal looks for and finds voter records that MIGHT be a match. For example, if the Driver's License, Last Name, Date of Birth and first character of Middle Name are the same between two records, it may be a duplicate match but VoteCal requires a user to review the voter records and make the decision. Also, If there are multiple high confidence matches (3 or more voters), VoteCal downgrades the match from a high confidence to a potential match to ensure that a county person reviews the matches for accuracy.</p> <p>Note: Once the potential duplicate match messages have been cleared, VoteCal will not send another potential duplicate match message for that pair again, unless a county calls SOS and requests to clear the match determination. This would occur if a county matched a potential duplicate pair by mistake.</p>	<p>County Action:</p> <ol style="list-style-type: none"> 1. Review both voter records. 2. Compare the signatures, first name, last name, middle name, DOB, SSN4 and determine if they are the same voter or not 3. If the two voter records appear to be for the same person, respond to the message, Yes - Same Voter. 4. If the two voter records appear to be two different people, respond to the message, No - Not the Same Voter. <p>VoteCal Action:</p> <p>Once the Potential Duplicate Match message is responded to, VoteCal performs the following actions:</p> <ul style="list-style-type: none"> • If Yes – Same Voter: VoteCal merges the older voter record into the most recent voter record, making it the surviving voter record. <ul style="list-style-type: none"> ○ If the potential duplicate voter merge process can automatically determine the surviving voter record, then the voter records are merged and the voter activity log is updated for both records. ○ If the merge process cannot automatically determine the surviving voter record, then a Merge Voter Determine Survivor message is sent to the county (Refer to the Merge Voter Determine Survivor section for additional information). • If No – Not Same Voter: VoteCal does not merge the voter records and the voter activity log is updated in both records. (Note: VoteCal marks the voters as not a match and will not match those voter records again in the future. If voters are erroneously marked as not a duplicate voter match, contact the VoteCal Help Desk to request to clear the match determination).



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 6 of 23

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
<p>Potential DMV COA Match to Voter</p> <p>Note: See DMV COA guidance document for additional information on DMV COA messages and processes.</p>	<p>This message is received when a DMV change of address record matches a voter(s) record in VoteCal. VoteCal receives change of address records daily from the DMV and matches the address changes against the voter registration records. When VoteCal finds a match with a voter(s), it sends the potential match message to the county of the new address (the receiving county). If the address change is out of state, VoteCal sends the potential match message to the voter's current county.</p> <p>If VoteCal finds more than one voter match for an address, it will send the receiving county a list of all of the potential voters and the impacted county(s).</p>	<p>County Action:</p> <ol style="list-style-type: none"> 1. Review the voter record(s) and the change of address record. 2. Determine if the new address record is a match to the voter record. 3. If there is more than one potential voter match, staff may need to contact the other county(s) for resolution. Accept the appropriate voter match and reject the remaining matches, as applicable. 4. Respond to the EMS Message, Yes – voter record matches DMV COA record, or No – voter record does not match the DMV COA record. 5. If the address change matches a voter: apply the address update, update the voter's Registration Date to the effective date that is included in the change of address record, and precinct the voter. (See the Updating Registration Date guidance document for additional information.) <p>VoteCal Action</p> <ul style="list-style-type: none"> • If No - Not Same Voter: No action to voter record. • If Yes - Same Voter: <ol style="list-style-type: none"> 1. If the new address is within the county, VoteCal updates the voter address with the address provided and precinct assignment. 2. If the address change moves a voter to a new county, the voter is removed from the original county, a message is sent to the original county EMS to cancel the voter, and the voter record is added to the new county. 3. If the address is an out of state address, VoteCal updates the status to "Cancelled" with a reason of "DMV COA Move out of State" and sends a message to the EMS to cancel the voter.
<p>Potential Deceased Match</p>	<p>When a county adds or updates a voter registration record, VoteCal looks for any death records received from the California Department of Public Health</p>	<p>County Action:</p> <ol style="list-style-type: none"> 1. Review the voter record and the associated deceased record. 2. Compare the DOB, name and any other information included in the



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 7 of 23

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
	<p>(CDPH) that may be a match to that voter. If any records appear to match the voter record, VoteCal sends the Potential Deceased Match message to the county to research and resolve the potential match.</p> <p>(Note: This message is ONE voter record that may match to one or more deceased records.)</p> <p>Once the death match messages have been cleared, VoteCal will not send another potential match for that voter pair again, unless a county calls the VoteCal Help Desk and requests they clear the match determination.</p>	<p>deceased record to help verify a match. (Depending upon the availability of resources, counties may review obituaries, check DMV records, search county death records, etc., to verify the voter's deceased record.)</p> <ol style="list-style-type: none"> 3. Determine whether or not the deceased record is a match to the voter record. 4. Respond to the EMS Message, Yes – voter record matches deceased record, or No – voter record does not match the deceased record. <p><u>VoteCal Action:</u> Once the Potential Deceased Match message is responded to, VoteCal performs the following actions:</p> <ul style="list-style-type: none"> • If Yes - Cancel voter record with reason of "Voter Deceased", set the effective date to the date the death file is received from CDPH and update voter activity log. • If No – Update the voter record with no voter match decision.
<p>Potential Deceased Match to Voter</p>	<p>When VoteCal receives new deceased records from the CDPH, those records are run against all of the voter registration records in VoteCal. If a deceased record appears to match a voter, VoteCal sends a Potential Deceased Match to Voter message to the county to review and determine if the deceased record matches the voter record.</p> <p>(Note: This message is ONE death record that may match to one or more voter records.)</p> <p>Once the death match messages have been cleared, VoteCal will not send another potential match for that voter pair again, unless a county calls the VoteCal Help Desk and requests that they clear the match determination.</p>	<p><u>County Action:</u></p> <ol style="list-style-type: none"> 1. Review the voter record and the associated death record. 2. Compare the DOB, name and any other information included in the deceased record to help verify a match. (Depending upon the availability of resources, counties may also review obituaries, check DMV records, search county death records, etc., to verify the voter's deceased record) 3. Once the deceased match determination is made, respond to the EMS Message, Yes – voter record matches deceased record, or No – voter record does not match the deceased record. <p><u>VoteCal Action:</u> Once the Potential Deceased Match message is responded to, VoteCal performs the following actions:</p>



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 8 of 23

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
		<ul style="list-style-type: none"> • If Yes - Cancel voter record with reason of "Voter Deceased", set the effective date to the date the death file is received from CDPH and update voter activity log. • If No - Update voter record with no voter match decision.
<p>Potential Felon Match</p>	<p>When a county adds or updates a voter registration record, VoteCal looks for any felon records received from the California Department of Corrections and Rehabilitation (CDCR) that may be a match to that voter. If there is a potential match, VoteCal sends the Potential Felon Match message to the county to review and determine if the felon record matches the voter record.</p> <p>(Note: This message is ONE voter record that may match to one or more felon records.)</p> <p>Once the felon match messages have been cleared, VoteCal will not send another potential match for that pair again, unless the county contacts the VoteCal Help Desk and requests they clear the match determination.</p>	<p>County Action:</p> <ol style="list-style-type: none"> 1. Review the voter record and the associated felon record. 2. Compare DOB, SSN4, name and all of the information included in the felon record to help verify a match. (Counties may also try contacting parole officers, etc., to verify the felon match) 3. Once the felon match determination is made, respond to the EMS Message, Yes – voter record matches felon record, or No – voter record does not match the felon record. <p>VoteCal Action: Once the Potential Felon Match message is responded to, VoteCal performs the following actions:</p> <ul style="list-style-type: none"> • If Yes – Cancel voter record with reason of "Felon", set effective date to the date the felon file is provided by CDCR and update voter activity log. • If No – No action to voter record.
<p>Potential Felon Match to Voter</p>	<p>When VoteCal receives new felon records from the CDCR, those records are run against all of the voter registration records in VoteCal. If a felon record appears to match a voter, VoteCal sends a Potential Felon Match to Voter message to the county to review and determine if the felon record is a match to the voter record.</p> <p>(Note: This message is ONE felon record that may match to one or more voter records.)</p>	<p>County Action:</p> <ol style="list-style-type: none"> 1. Review the voter record and the associated felon record. 2. Compare DOB, SSN4, name and all of the information included in the felon record to help verify a match. (Counties may also try contacting parole officers, etc., to verify a felon match) 3. Once the felon match determination is made, respond to the EMS Message, Yes – voter record matches felon record, or No – voter record does not match the felon record.



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 9 of 23

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
	<p>Once the felon match messages have been cleared, VoteCal will not send another potential match for that pair again, unless the county contacts the VoteCal Help Desk and requests they clear the match determination.</p>	<p><u>VoteCal Action:</u> Once the Potential Felon Match message is responded to, VoteCal performs the following actions:</p> <ul style="list-style-type: none"> • If Yes – Cancel voter record with reason of “Felon”, set effective date to the date the felon file is provided by CDCR and update voter activity log. • If No - No action to voter record.
<p>National Change of Address (NCOA) Potential Address Change</p>	<p>VoteCal sends all active voter records to the Employment Development Department (EDD) on a monthly basis to match against the NCOA database. Upon receiving a potential address change from the EDD that is after the most recent registration date, VoteCal creates the NCOA Potential Address Change message. When the NCOA Forwarding Effective Date is before the voter registration date, VoteCal doesn't send the message to the county; the presumption is the registration took place after the address change and the county has the most current address. When the NCOA Forwarding Effective Date is before or equal to a change of address that has already been received by the SOS, VoteCal doesn't send the message to the county. The presumption is the county already has the most current address or the county has already been notified of the potential address change.</p>	<p><u>County Action:</u></p> <ol style="list-style-type: none"> 1. Review the voter record and the associated NCOA change of address record. 2. Determine if change of address record is a match to the voter record and respond to the EMS message. (Reminder: do not delete messages, VoteCal does not recognize “delete”; messages remain in VoteCal until a response is received). 3. If address change is within the county, apply the address update, assign a precinct, select NCOA disposition, “In County Move”, and the new address is updated (it may be different than what was sent in the NCOA record because of address standardization). Next, update the Registration Date to the date embedded in each NCOA voter record. (Refer to the Updating Registration Date guidance document for additional information) 4. If address change is a potential out-of-county move, select the NCOA disposition, “Potential Out of County Move” (Note: this response does not prompt a VoteCal move action); or No – voter record does not match the change of address record. 5. If the address is not an in-county or out of county move select the appropriate response from the remaining NCOA dispositions, “Move Ignored” or “Potential Move No Forward”. <p><u>VoteCal Action:</u> Once the NCOA Potential Address Change message is responded to, VoteCal performs the following actions:</p>



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 10 of 23

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
		<ul style="list-style-type: none"> If Yes – Update the voter record with the new address if appropriate, update the precinct and the NCOA disposition; update voter activity log; if appropriate indicate Voter Notification Card (VNC) required. <p>If No – Update voter record with no match decision; update voter activity log.</p>

4 Merge Voter Determine Survivor

When high confidence or potential duplicate voter pairs are identified, if VoteCal can determine which record should be the “survivor,” the merge of the records occurs automatically. However, when VoteCal cannot make a determination to automatically merge the voter records, it sends a “Merge Voter Determine Survivor” (MVDS) message to the county with the most recent registration date for the county to review and make a determination on which record should survive. Consequently, it is very important to update the Registration Date when accepting a new address, see the “Updating Registration Date” guidance document for details. Updating registration dates will aid VoteCal and county election official staff in identifying surviving voters.

Through the process of loading counties’ data into the VoteCal database and adding new and updated voter registrations, each county has received “Merge Voter Determine Survivor” messages. The SOS and EMS vendors have assisted the counties by auto closing thousands of MVDS messages. Working the remainder of these messages will take time, but is essential in creating a single centralized voter record for each registered voter in California.

The Merge Voter Determine Survivor messages are triggered based on the following three scenarios:

1. The voter registration dates are the same on both voter records.
2. There is voter participation history on the “older” voter registration record that is more recent than the “newer” voter registration record.
3. There is voter activity transaction history that is more recent on the “older” voter registration record than the “newer” voter registration record.

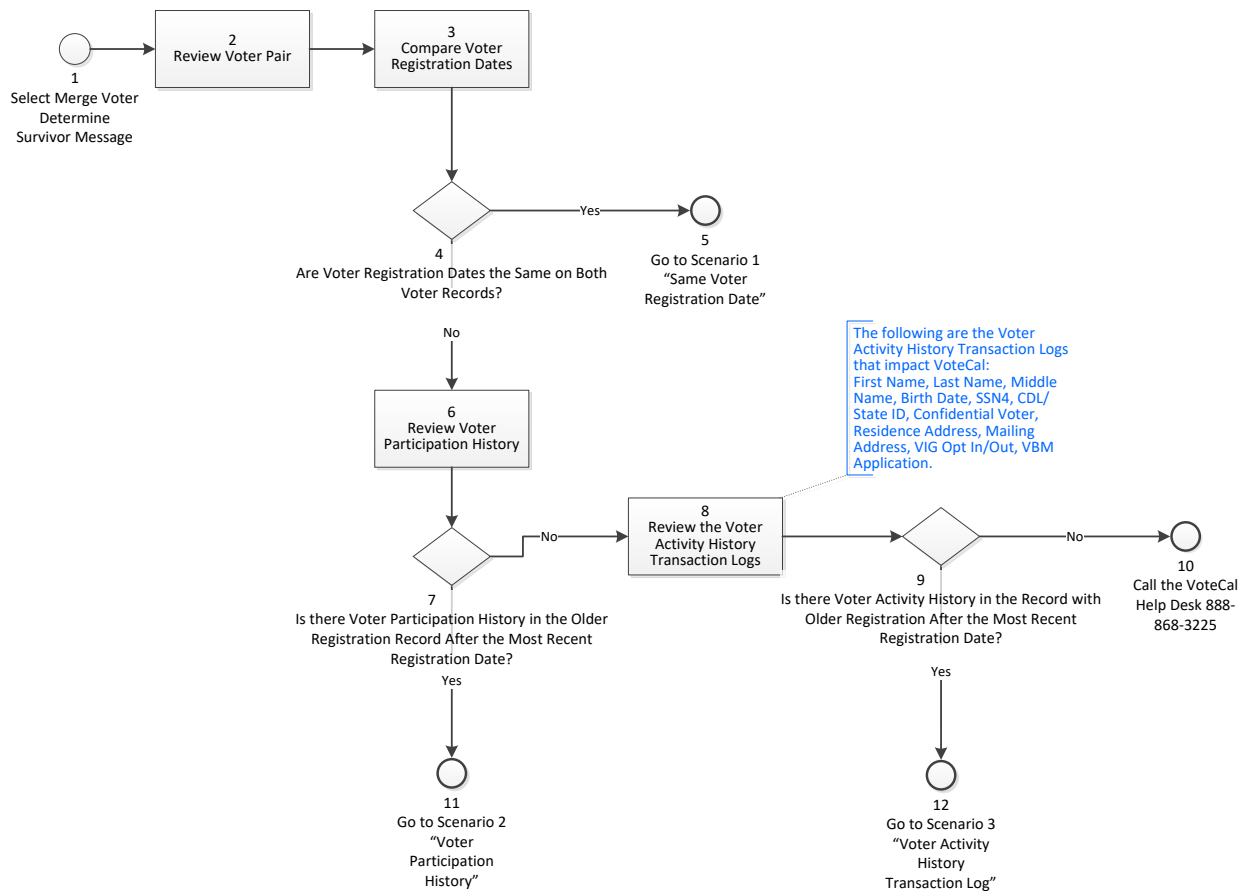
4.1 How to Determine the Surviving Voter Record

When deciding which voter record is the surviving record, county staff should review and analyze the voter information beyond the voter registration date in order to ensure the voter record selected as the surviving record is the county where the voter currently resides.

Below are suggested general steps for analyzing Merge Voter Determine Survivor messages. Once a Merge Voter Determine Survivor scenario is identified, go to the specific scenario for additional information for analyzing and making a determination based on the specific scenario.

Figure 1: Merge Voter Determine Survivor Workflow describes the general steps for analyzing the Merge Voter Determine Survivor messages. Scenarios 1 through 3 provide recommended steps to assist county staff in making the best surviving voter determination.

Figure 1: Merge Voter Determine Survivor Workflow



4.2 General Steps for Analyzing Merge Voter Determine Survivor

1. Review both voter records.
2. Compare the voter registration dates on both voter records.
3. If the voter registration dates on both records are the same, stop here and go to, **“Scenario 1: Same Voter Registration Dates.”**
4. Once it is determined that the voter registration dates are **not** the same, review both voter records and determine if voter participation history occurred on the “older” registration record that was more recent than the voter record with the most current voter registration date.
5. If the voter voted in the county with the older voter registration date after the most current voter registration date, stop here and go to **“Scenario 2: Voter Participation History.”**



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 12 of 23

6. If the voter registration dates are **not** the same and there is no voter participation history on the older record after the most recent voter registration date, review the voter activity history transaction logs. See Table 3: Voter Activity Log Transactions Impacting Merge Voter Determine Survivor for a list of the activities that impact VoteCal’s ability to determine the surviving voter.
7. If any of the transactions in Table 3: Voter Activity Log Transactions Impacting Merge Voter Determine Survivor occurred in the “older” voter registration record more recent than the voter record that has the most current voter registration date, stop here and go to, “Scenario 3: Voter Activity History Transaction Log.”
8. If you have reviewed this document and cannot identify the reason for the Merge Voter Determine Survivor message, call the VoteCal Help Desk for assistance (888) 868-3225.

Table 3: Voter Activity Log Transactions Impacting Merge Voter Determine Survivor

ACTIVITY CODE ID	ACTIVITY DESCRIPTION
7	First Name
8	Last Name
9	Middle Name
10	Birth Date
12	SSN4
13	CDL/State ID
20	Confidential Voter
25	Residence Address
29	Mailing Address
33	VIG Opt In/Out
35	VBM Application

4.2.1 Scenario 1: Same Voter Registration Dates

In this scenario, VoteCal is unable to make a determination because the voter registration dates are the same date on both voter records. When both records have the same voter registration date, VoteCal sends the message to the county with the last record in. (Example: County A enters a new voter registration card at 8:00AM for Joe Green and County B enters a new voter registration card for Joe Green at 8:06AM, County B receives the message.)

Once it is determined that the registration date on both voter records is the same, conduct the following steps prior to making a determination:

1. Identify the reason for the same registration dates. Contact the other county or the voter to determine the reason for two registrations on the same date. Things to consider:
 - What are the statuses of the voter records? (Active/Inactive/Cancelled)



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 13 of
23

- Is this a county data entry error?
 - Did the voter make a mistake?
2. Verify the current residential address of the voter. Contact the voter or the other county, if necessary. A user may also want to conduct a statewide search on the other voter record to assist in determining the most recent residential address.
 3. Once the most current residential address is identified, respond to the Merge Voter Determine Survivor message by selecting the surviving voter record.

4.2.2 Scenario 2: Voter Participation History

In this scenario, VoteCal is unable to make a determination because there is voter participation history on the “older” voter registration record dated more recent than the voter record with the more current voter registration date (Example: voter registered in County A in 6/2013, voter registered in County B in 11/2015, voter voted in County A in 11/2015). Conduct the following steps prior to making a determination:

1. Contact the other county to verify if the voter participation history in the older voter record is correct. Things to consider as you research:
 - What are the statuses of the voter records? (Active/Inactive/Cancelled)
 - Was the voter participation history added by mistake? (e.g., if a county used a wand they may have scanned the wrong voter)
 - Did the voter vote in the county with the “older” voter registration record because the voter completed a new registration affidavit in the new county after the 15-day close and was therefore still eligible to vote in the county with the older voter registration record?
 - Did the voter move out of your county and back to the county with the “older” registration record and assume they were still registered?
2. Contact the voter or the other county to verify the current residential address of the voter, if necessary.
3. Once the surviving voter record is determined, respond to the Merge Voter Determine Survivor message by selecting the surviving voter record.

4.2.3 Scenario 3: Voter Activity History Transaction Log

In this scenario, VoteCal is unable to make a determination because the voter activity log on the “older” voter registration record has voter activity dated after the registration date on the voter record with the more current voter registration date (Example: the county with the oldest registration record updated the residence address of the voter). Conduct the following steps prior to making a determination:

1. Determine why there is voter activity history on the older record after the more current voter registration date. Refer to Table 3: Voter Activity Log Transactions Impacting Merge Voter Determine Survivor. for examples of transactions that can initiate a Merge Voter Determine Survivor message. Things to consider prior to making a determination:
 - Review the following:
 1. User name to determine type of user who initiated the transaction
 2. Specific field for the transaction (e.g., local status reason vs. statewide reason code)
 3. Transactions that occurred on the same day that provide a full picture of what occurred



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 14 of 23

- What are the statuses of the voter records? (Active/Inactive/Cancelled)
 - Was the voter activity a result of a data clean-up effort (historical or in preparation for VoteCal)? Check county VoteCal go-live dates and if the activity occurred in the months prior to their go-live date, then the change might have occurred due to preparing data for integration to VoteCal.
 - Was the voter activity a result of data clean-up at the time of cancellation of the voter registration record? The change might have occurred due to the county updating information when a voter re-registers.
2. Review both voter records for the most current address and determine the surviving record. Contact the voter or the other county, if necessary.
 3. Once the surviving voter is determined, respond to the Merge Voter Determine Survivor message by selecting the surviving voter record.

Note: When reviewing activity transaction logs it is important to understand the differences between each of the EMS activity transaction logs. For a list of the activity transaction logs refer to Appendix B.

5 Resolve Unique Identifier (UID) Message

The resolve UID message is generated when VoteCal attempts to assign a HAVA ID using the voter’s driver’s license number or SSN4 and finds there is an existing voter with the same HAVA ID. VoteCal creates a unique ID for these voters; however, it is up to the county to resolve these duplicate UIDs. In many cases these two voter records are the same person; therefore, potential duplicate match and merge voter determine survivor messages should be resolved and responded to prior to working resolve UID messages. If a user marks a resolve UID message as completed and does not make a match determination for a potential duplicate or MVDS message the resolve UID message will re-generate. For those voters that are not duplicates, the user must determine why the two voters have same driver’s license number or SSN4. If the county has performed the county actions listed in Table 4: Resolve UID Message and the UID message returns, the county should contact the SOS VoteCal Help Desk at 888-868-3225 or email VoteCalHelp@sos.ca.gov.

Table 4: Resolve UID Message

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
Resolve Unique Identifier	The Resolve UID message is sent to county(s) when VoteCal attempts to create a HAVA ID using the voter’s driver’s license or SSN4 and finds there is already a voter(s) who was assigned this HAVA ID. Counties need to research and resolve the matching CA DL/ID or SSN4. In some cases the voter’s may be a match or the wrong CA DL/ID or SSN4 was provided by the voter or a user made a data entry error when entering the voter record. Once the county responds	<p>County Action:</p> <ol style="list-style-type: none"> 1. Review both voter records 2. Compare the DOB, CA DL/ID, SSN4 and name for both records. 3. Determine if the correct CA DL/ID is entered for <i>each</i> of the voter records. Make the appropriate corrections to the voter record(s) by one or more of the following actions: <ol style="list-style-type: none"> a. If they are not the same voter, correct the CA DL/ID. b. If they are the same voter, look for a Potential Duplicate Match message and if one exists



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 15 of 23

EMS MESSAGE TYPE	WHY DID I GET THIS?	ACTION TO RESOLVE MESSAGE
	<p>to the message, VoteCal checks again and if the issue hasn't been resolved, VoteCal sends the message again.</p> <p>Note: all potential duplicate match messages and merge voter determine survivor messages should be resolved before working resolve unique identifier messages; because if a potential duplicate exists and they are a match, a new Resolve UID message is sent to the counties involved.</p>	<p>respond appropriately. If a Potential Duplicate match does not exist, call the VoteCal Help Desk.</p> <p>4. Respond to the EMS Message question, "Same Voter?" Yes or No. (Note: A "Yes" response <i>does not automatically</i> merge the voters. The response only closes the message. A county action is required to correct the voter record in order for the merge process to be initiated or respond to the potential duplicate match message if one exists.)</p> <p><u>VoteCal Action:</u> Once the Resolve UID message has been responded to by all counties involved, VoteCal checks if the voters have been merged or not merged, and if the CA DL/ID of two or more voter records are the same. If two or more voter records are still the same, a new Resolve UID message is sent to the counties involved.</p>



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 16 of 23

6 Appendix A

Table 5: VoteCal Messages to EMS lists the messages VoteCal sends to the EMS. The response required field notes the messages that VoteCal requires a response. The county EMS responds automatically to some of the messages and other messages require user intervention.

Table 5: VoteCal Messages to EMS

NUM	MESSAGE	DESCRIPTION	VOTECAL RESPONSE REQUIRED?
1	Affidavit Number not Found	The voter registration affidavit number was not located in affidavit issuance tracking.	No
2	Batch Clear Match ID	SOS clears matches using VoteCal process. These matches are unmatched when already applied and/or potential matches can be ignored.	No
3	Confidential Voter Cancelled	The registration status of a confidential voter was updated to canceled.	No
4	Confidential Voter Merged	A confidential voter was merged with another voter record.	No
5	Confidential Voter Status Expired	The confidential status of a voter has expired.	No
6	Confidential Voter Warning	This is a warning message that a confidential that a voter's confidential status is expiring.	No
7	Critical Error	A voter registration was not accepted.	No
8	Deficient Error	A voter registration record was accepted but with validation issues that the county needs to correct.	Yes
9	DMV COA No Match	VoteCal received a change of address from DMV but an Active/Inactive/Pending voter record could not be found to be a match.	No
10	DMV COA Transactions Since Match	Changes have occurred to a voter between the time of a match and an un-match for a DMV COA transaction. The county needs to manually review and update as needed.	No
11	Extract Files Generated	VoteCal created extract file(s) for the county. The message includes the file for use by the EMS.	No
12	High Confidence Deceased Match	A voter registers and VoteCal finds a high confidence deceased match and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
13	High Confidence Deceased Match For Confidential Voter	A confidential voter registers and VoteCal finds a high confidence deceased match and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
14	High Confidence Deceased Match to Voter	VoteCal receives a new deceased record, matches it against the voter registration records, finds a high confidence deceased match with a voter and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
15	High Confidence	VoteCal receives a new deceased record,	Yes (EMS responds).



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 17 of 23

NUM	MESSAGE	DESCRIPTION	VOTECAL RESPONSE REQUIRED?
	Deceased Match to Voter For Confidential Voter	matches it against the voter registration records, finds a high confidence deceased match with a confidential voter and automatically cancels the registration.	This functionality is not enabled at this time.
16	High Confidence DMV COA Match to Voter	VoteCal receives a DMV COA, matches it against the voter registration records, finds a high confidence match with a voter and an automatically updates the address.	Yes (EMS responds). This functionality is not enabled at this time.
17	High Confidence Duplicate Match	VoteCal finds a high confidence duplicate match and either updates or merges the voter registration records.	Yes (EMS responds)
18	High Confidence Felon Match	A voter registers and VoteCal finds a high confidence felon match and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
18	High Confidence Felon Match For Confidential Voter	A confidential voter registers and VoteCal finds a high confidence felon match and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
19	High Confidence Felon Match to Voter	VoteCal receives a new felon record, matches it against the voter registration records, finds a high confidence felon match and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
20	High Confidence Felon Match To Voter For Confidential Voter	VoteCal receives a new felon record, matches it against the voter registration records, finds a high confidence felon match with a confidential voter and automatically cancels the registration.	Yes (EMS responds). This functionality is not enabled at this time.
21	List Of Values Changed	SOS modified a standard value in the list of values and requested the changes to be sent to the counties.	No
22	Merge Voter Determine Survivor	VoteCal cannot determine which voter should be the survivor of a merge due to voter participation or voter activity on the record with the oldest registration date. SOS requests the county to determine which voter record is the best voter record.	Yes
23	Merge Voter Determine Survivor for Confidential Voter	VoteCal cannot determine which voter should be the survivor of a merge due to voter participation or voter activity on the record with the oldest registration date. At least one of the voter records belongs to a confidential voter. SOS requests the county to determine which voter record is the best voter record.	Yes
24	Message Cleared	SOS clears messages using VoteCal process. EMS can clear these messages without a response.	No
25	NCOA Potential Address	VoteCal received a National Change of Address potential address change and requests the	Yes



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 18 of 23

NUM	MESSAGE	DESCRIPTION	VOTE CAL RESPONSE REQUIRED?
	Change	county to validate the address change.	
26	New Voter	VoteCal received and processed a new voter record.	No
27	Online Voter Registration Pending Signature	VoteCal received an online application that does not contain enough information to register a voter or the voter elected to print/sign/mail prior to completing the registration process.	No
28	Political Party Changed	SOS created a new or modified an existing political party.	No
29	Potential Deceased Match	A voter registers and VoteCal finds potential matches with deceased records. SOS requests the county to determine the validity of the match.	Yes
30	Potential Deceased Match For Confidential Voter	A confidential voter registers and VoteCal finds potential matches with deceased records. SOS requests the county to determine the validity of the match.	Yes
31	Potential Deceased Match to Voter	VoteCal receives a new deceased record, matches it against the voter registration records, and finds potential matches with voters. SOS requests the county to determine the validity of the match.	Yes
32	Potential Deceased Match to Voter For Confidential Voter	VoteCal receives a new deceased record, matches it against the voter registration records, and finds potential deceased matches with voters. SOS requests the county to determine the validity of the match. At least one of the potential matched voters is a confidential voter.	Yes
33	Potential DMV COA Match to Voter	VoteCal receives a DMV COA, matches it against the voter registration records and finds potential matches with voters. SOS requests the county to determine the validity of the match.	Yes
34	Potential DMV COA Match to Voter For Confidential Voter	VoteCal receives a DMV COA, matches it against the voter registration records and finds potential matches with voters. SOS requests the county to determine the validity of the match. At least one of the potential matched voters is a confidential voter.	Yes
35	Potential Duplicate Match	A voter registers and VoteCal finds potential matches with other voters. SOS requests the county to determine the validity of the match.	Yes
36	Potential Duplicate Match For Confidential Voter	A voter registers and VoteCal finds potential matches with other voters. SOS requests the county to determine the validity of the match. At least one of the potential matched voters is a confidential voter.	Yes
37	Potential Felon Match	A voter registers and VoteCal finds potential matches with felon records. SOS requests the county to determine the	Yes



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 19 of 23

NUM	MESSAGE	DESCRIPTION	VOTECAL RESPONSE REQUIRED?
		validity of the match.	
38	Potential Felon Match For Confidential Voter	A voter registers and VoteCal finds potential matches with felon records. SOS requests the county to determine the validity of the match.	Yes
39	Potential Felon Match to Voter	VoteCal receives a new felon record, matches it against the voter registration records and finds potential matches. SOS requests the county to determine the validity of the match.	Yes
40	Potential Felon Match to Voter For Confidential Voter	VoteCal receives a new felon record, matches it against the voter registration records and finds potential matches. SOS requests the county to determine the validity of the match. At least one of the potential matched voters is a confidential voter.	Yes
41	Resolve UID	More than one voter has the same unique identifier. VoteCal assigned a unique HAVA ID using the SOS algorithm but requests the county to resolve these duplicate HAVA IDs.	Yes
42	Scheduled Task Cancelled	SOS Administrator cancels a scheduled task initiated by the EMS.	No
43	Scheduled Task Failed	VoteCal failed to complete a scheduled task.	No
44	Statewide Election Changed	SOS created a new or modified an existing statewide election.	No
45	Synch Completed	VoteCal completes a synchronization request for a county.	Yes (EMS responds)
46	Synch Requested	VoteCal received a synchronization request. SOS requests the county EMS to send the matching data from the county for comparison.	Yes (EMS responds)
47	UnMerge Duplicate Voter	This message is to notify the EMS that an un-merge has occurred. Within the message is an indicator as to whether transactions have happened between the time of the merge and the un-merge. If transactions have happened, the county needs to manually review and update the voter records as needed.	No
48	Voter Cancelled	VoteCal has changed a voter status to cancelled.	No
49	Voter Comment Created	VoteCal has created a voter comment.	No
50	Voter Merged	Voter merged a voter record with another voter record.	No
51	Voter Moved	VoteCal moved a voter between counties.	No
52	Voter Registration Pending Precinct	VoteCal requests the county to supply a precinct for a voter. The voter status is pending, awaiting precinct assignment.	No
53	Voter Sent Notices	This message includes a list of voters that notices are generated for a county by SOS. This message is only sent for notice type 'CAN' and	No



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 20 of
23

NUM	MESSAGE	DESCRIPTION	VOTECAL RESPONSE REQUIRED?
		'VNC'.	
54	Voter Updated	VoteCal updated a voter record.	No



7 Appendix B

Table 6: Activity History Transaction Log Descriptions contains a list of the activities that VoteCal displays as well as a sample of how VoteCal documents the change. The local county EMS may not include all three columns.

Table 6: Activity History Transaction Log Descriptions

ACTIVITY CODE ID	ACTIVITY DESCRIPTION	SAMPLE DESCRIPTION OF CHANGE
1	Havald	Value changed to X from Y using HAVA ID Method
2	VoterSignature	Added signature created on Date received from DMV
3	AffidavitImage	Add affidavit image created on Date
4	CorrespondenceImage	Add correspondence of type PDF on Date
5	VoterId	Received new registration with Voter ID <insert voter ID>
6	EmsVoterId	Value changed to X from Y
7	FirstName	Value changed to X from Y
8	LastName	Value changed to X from Y
9	MiddleName	Value changed to X from Y
10	BirthDate	Value changed to X from Y
11	Gender	Value changed to X from Y
12	SSN4	Value changed to X from Y
13	CdIStateId	Value changed to X from Y
14	RegistrationEffectiveDate	Value changed to X from Y
15	StatusChangeDate	Value changed to X from Y
16	County	Value changed to X from Y
17	PoliticalParty	Value changed to X from Y
18	VoterStatus	Value changed to X from Y
19	VBMVoterType	Value changed to X from Y
20	ConfidentialVoter	Value changed to: Is Confidential Voter – True Confidential Application Date: Date Confidential Legal Basis: Court Ordered
21	HavaldRequired	Value changed to X from Y using HAVA ID Method
22	LanguagePreference	Value changed to X from Y
23	RegistrationMethod	Value changed to X from Y
24	Precinct	Value changed from precinct id X, number Y, and name Z to id A, number B, and name C
25	ResidenceAddress	Added Address If residential address is standard then:



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 22 of 23

ACTIVITY CODE ID	ACTIVITY DESCRIPTION	SAMPLE DESCRIPTION OF CHANGE
		Line 1 - HouseNumber HouseFractionNumber HouseNumberSuffix PreAddressDirectionalCode StreetName PostAddressDirectionalCode AddressStreetTypeCode Line 2 - AddressUnitTypeCode AptNumber Line 3 - City, StateCode ZIP5-ZIP4 If residential address is non-standard then: Line 1 Line 2 Line 3 City, StateCode ZIP5-ZIP4
29	MailingAddress	Added Line 1 - AddressFreeFormText1 Line 2 - AddressFreeFormText2 Line 3 - AddressFreeFormText3 City, StateCode ZIP5-ZIP4 CountryCode
33	VIGOptOut	Value changed to X from Y
34	BirthPlace	Value changed to X from Y
35	VBMApplcations	Added VBM Application type Online received on Date
36	Extract	Voter included in extract X on Date
40	DMVCOAMatch	MultipleHighConfidenceMatch match using match set DMV_Name_DOB found with DMV COA record ID 12345
41	DMVCOAMatchValidity	The potential match using DMV_NAME_DOB found with DMV COA record ID 2468759 is False. No Match found In-County
42	UnmatchDMVCOARecord	Unmatched with DMV COA record id X
43	DeceasedMatch	MatchesMeetingMinimumConfidenceThreshold match using match set V2D_SSN4_Name_DOB_HI found with deceased record ID 2468759
44	DeceasedMatchValidity	The potential match using V2D_SSN4_Name_DOB_HI found with deceased record ID 2468759 is False. No Match found In-County
45	UnmatchDeceasedRecord	Unmatched with deceased record id X
46	FelonMatch	SingleHighConfidenceMatch match using match set V2F_Name_DOB found with felon record ID



Guidance: EMS Messages

Issuance Date: December 17, 2015

Revision Date: September 6, 2016

Page 23 of 23

ACTIVITY CODE ID	ACTIVITY DESCRIPTION	SAMPLE DESCRIPTION OF CHANGE
		123456
47	FelonMatchValidity	The potential match using V2F_Name_DOB found with felon record ID 202503 is True. no value
48	UnmatchFelonRecord	Unmatched with felon record id X
49	DuplicateVoterMatch	SingleHighConfidenceMatch match using match set V2V_ID_Name_DOB_HI found with voter record ID 19257297 Note: The MergeVoterDetermineSurvivor message may be sent to the county to determine which voter record is the survivor. Until a response is received, the voters are not merged.
50	MergeVoter	Voter merged with voter record id <insert voter ID>
51	DuplicateVoterMatchValidity	The potential match using V2V_ID_FName_DOB found with voter record ID 4765784 is IsCorrectDetermination-True.no value
52	UnmergeVoter	Unmerged with voter record id X
53	NCOARecordMatch	Potential match found from NCOA Response with NCOA Record Id X
54	NCOARecordMatchValidity	Potential match found from NCOA Response with NCOA record Id X and resolved as Match
55	CountyArchiveVoter	Value changed to X from Y
56	LocalStatusReason	Value changed to X from Y
57	VoterStatusReason	Value changed to X from Y
58	NCOARecordMatchForwarded	Potential match found from NCOA Response with NCOA Record Id X was forwarded to CountyName County
59	VIGExtract	Voter included in DateTime for ElectionName, requested by CountyName
60	SampleBallotOptOut	Value changed to X from Y
61	ElectronicNotificationEmail	Value changed to X from Y