March 19, 2018

Honorable Matthew Dunlap  
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Julie Flynn  
Deputy Secretary of State  
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148 State House Station  
Augusta, Maine 04333-0148

Dear Matt and Julie:

As you know, the League of Women Voters Maine shares with your office a commitment to ensuring that Maine elections continue to meet high standards of quality while striving to harmonize election principles, best practices, and practical realities. In that spirit, we earlier shared with you a copy of our Guiding Principles for RCV implementation.

No one knows better than the two of you that the stakes for this implementation reach beyond ranked choice voting itself. At a time when cynical manipulators of public opinion hover over elections with the explicit intent of sowing cynicism to drive down voter turnout, we want this election to build confidence. To that end, every resource, public and private, should be used to prepare Maine for the implementation of this far-reaching change. Every resource available, public and private, should be used to disseminate the Secretary of State’s messages to voters and other stakeholders. To bring that about, we believe public-private cooperation is essential, and we stand ready to do what we can to support the effort.

The recommendations contained in the attachment represent an attempt -- in the public interest -- to apply our Guiding Principles to the pressing reality of RCV implementation for 2018. We have left aside, for the moment, our hopes and aspirations for the future. Although we appreciate the extremely busy time you are going through, we had hoped to be able to engage with your office in some dialog on these considerations and recommendations -- without that, our understanding of the technical aspects of many of these items is surely imperfect. We have no doubt that many of the items discussed in the attached are already in your plan and well underway. It is our hope that, in fleshing out ideas and ideals, we may trigger some insights that will assist you in your task.

If further discussion would be of value, we stand by ready and eager to meet with your team at your convenience.

Sincerely yours,

Ann Luther  
League of Women Voters of Maine

Attachment: Preliminary Recommendations on RCV Implementation
## Preliminary Recommendations on RCV Implementation

<table>
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<tr>
<th>Rulemaking</th>
<th>Background, Assumptions, and Rationale</th>
<th>Recommendations</th>
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<tr>
<td>We understand that emergency rules may be promulgated soon now that the people's veto is certified for the June ballot. We also understand that there will be a brief public comment period on those emergency rules. We hope that there will be an opportunity to revisit those rules in a non-emergency process with robust public comment before the November election should the people's veto prevail in June.</td>
<td>We recommend that rulemaking for the 2018 elections be conducted with as much public input as practical given the short time frame.</td>
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| Ballot Design | Following the principle of economy, RCV and non-RCV elections can be placed on the same ballot in the order specified by Maine statute. The order of contests on the ballot should be consistent throughout the state. To the greatest extent possible, this should be done using the minimum number of ballot sheets while maintaining the high standard set by past practice for readability and to avoid confusion at local polling places. There is no technical reason to require a separate ballot page for RCV contests. The principle of accessibility asks that as far as possible, the ballot design employ best practices for voter comprehension; that it contain clear, simple instructions for voters; and that voters experiencing cognitive or physical disabilities have the same opportunity as other voters to vote their ranked-choice ballot privately and independently. | We recommend that the SOS design a ballot that fits the minimum number of pages in order to hold down expenses. We do not recommend separating RCV and non-RCV races on separate ballot pages except as might make ballot handing easier for local election officials. We recommend that the ballot contain clear, simple instructions at each transition between RCV and non-RCV contests. We recommend that there be an opportunity for public comment on the ballot design as early in the process as possible. We recommend that the order of contests on the ballot be consistent throughout the state, regardless of whether there is variation by precinct as to which races are RCV races and which are not. We recommend that the number of ranking options correspond to the number of candidates as long as there are six or fewer. |

The RCV law says that no fewer than six ranking options should be presented to voters. This gives election officials the
<table>
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<th>Option of offering more than six rankings if there are more than six candidates. It also seems to imply that six ranking options need to be presented even if there are fewer than six candidates.</th>
<th>We recommend that no more than six ranking options be provided even if there are more than six candidates. We recommend that races where only two candidates are contesting the election be presented as non-RCV contests.</th>
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<tr>
<td>For the initial implementation of RCV, the State’s current lease with ES&amp;S is assumed to be in place. Expansion of the number of machine count towns, though desirable, is not necessary for the 2018 elections under the principle of economy. Adding additional machines on a short-term basis to our current lease agreement does not appear to be essential or cost-effective, although we understand that some towns will need to lease additional equipment to process separate ballots for municipal elections. To make the process as accessible to voters as possible, scanners should be programmed to provide error messages and a chance for the voter to re-vote for:</td>
<td>We recommend that no additional scanners be procured by the state for 2018 unless they can be leased at a rate comparable to those already deployed (except that we do support procuring additional scanners for a central scanning facility). We recommend that scanners be programmed to inform voters of errors as ballots are fed into the scanners and to provide voters an opportunity to correct their ballot before it is cast. We recommend that scanner error notifications clearly identify RCV contest errors such as tied rankings, rank-skipping, and over-ranking. We do not recommend an error notification in situations where a voter does not utilize all the rankings available. In order to eliminate ambiguity in the interpretation of voter intent, we recommend that over-vote errors -- tying ranks -- invalidate the ballot for that ranking and for all subsequent rankings.</td>
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<tr>
<td>● Over-ranking a candidate -- ranking the same candidate more than once ● Over-voting -- assigning “tying” rankings to two or more candidates -- assigning two different candidates the same rank. [Note that this is the only condition that would cause lower-ranked choices to be invalidated.] ● Under-voting -- skipping a rank while voting subsequent ranks, for example, ranking #1 and #2, skipping #3 and #4, ranking #5.</td>
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Software & Hardware for Aggregation & Ranking Rounds

Software should be capable of exporting election CVR data in a format compatible with commonly used spreadsheet and statistical programs -- for example, a CSV text file.

The software should be capable of exporting round-by-round data reports, including a cast vote record based on ballot status after each round.

The software should generate diagnostic reports for each round (e.g. including the number of exhausted ballots, ballots counted).

The software should not rely on any online updates or repairs. The computer hardware using this software should be offline, ideally as a hardened computer.

Software should be capable of generating activity logs and reports pertaining to election accuracy.

Software should be capable of identifying permitted/non-permitted memory devices and digitally marking those devices that have been read.

The format of the cast vote record report should be designed for ease of use with the recount protocol. Among other considerations, this may require that results be sortable by town/precinct.

To ensure transparency and credibility of the result, we recommend that the election’s cast vote records be made publicly available in a common data format (such as CSV, XLS, etc…) as soon as they are received.

We recommend that diagnostic reports of election quality indicators be generated for each round of balloting, including the number of exhausted ballots, the number of invalidated ballots/rankings, and the number of overvotes.

We recommend that the cast vote record be sortable by municipality and election jurisdiction.

We recommend that the computer that aggregates the municipal cast vote records be hardened and operated offline.

We recommend that a detailed activity log be made publicly available each day beginning the day after Election Day and continuing until final election results are certified.
<table>
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<tr>
<th>UOCAVA and Absentee Voting</th>
<th>The implementation of RCV requires extensive voter education, including outreach to absentee voters who will not have access to the same levels of support as Election Day voters.</th>
<th>We recommend that the absentee and UOCAVA voting websites be updated with RCV instructions. We recommend that mailed ballots include an informational insert. We recommend that clerks be instructed to offer informational materials to voters picking up absentee ballots at the town office or voting in the presence of the clerk. We recommend that local election officials be trained to offer assistance to voters who request it in completing their RCV ballot. Such assistance should be offered from a neutral posture -- neither negative nor positive as to the benefits or drawbacks of RCV, so as to avoid any appearance of influencing the vote on the people’s veto question.</th>
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<tr>
<td>Election Day Protocols – Signage</td>
<td>Instructions placed near the entrance to balloting area should include:  ● A sample ballot with transitions between RCV and non-RCV contests clearly marked  ● Instructions for completing the ballot: mark one and only one per row; mark one and only one per column  ● Instructions that point out the consequences of  ○ Failing to mark a complete set of preference ranks  ○ Bullet voting -- ranking the same candidate 1st through 6th  ○ Over-ranking a candidate -- ranking the same candidate more than once  ○ Assigning “tying” rankings to two or more candidates -- assigning two different candidates the same rank. [Note that this is the only</td>
<td>We recommend clear signage at each polling place to help voters complete their ballot and avoid errors. Again, we recommend that poll workers and local election officials be trained to offer assistance to voters in completing their RCV ballot. Such assistance should be offered from a neutral posture -- neither negative nor positive as to the benefits or drawbacks of RCV, so as to avoid any appearance of influencing the vote on the people’s veto question.</td>
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<td>Election Night Results Reporting</td>
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| Machine-count towns should retain a duplicate of the cast vote record memory stick that will be stored in a lockbox along with other election materials. The memory stick to be sent for central processing should be stored in a lockbox until its removal at the time of shipping. The warden and observers should be present to sign the lockbox log. Local election officials in both hand-count and machine-count towns should announce totals on election night, just as they do now, including the number of ballots cast and the number of first-choice rankings for each candidate. For RCV contests, we recommend that each town report first round totals on Election Night, including number of ballots cast in each race and number of first-choice rankings for each candidate. This means that tabulation machines should be programmed to report first-round results for RVC contests. We recommend that election night and next-day processing be open to public observation. We recommend that a duplicate memory stick containing the CVR copy be created and sealed with other election materials in a tamper-proof lockbox. We recommend that hand-count towns count first-choice rankings on election night and announce the number of ballots cast in each race and the number of first-choice rankings for each candidate. | condition that would cause lower-ranked choices to be invalidated.]
| ○ Under-voting -- skipping a rank Reminders should be placed in a visible location in front of the tabulator/ballot box (TBD). |
### Election Data
### Transport
### and Security

A voting system is said to be software independent if an undetected error in the software cannot cause an undetectable change in the election outcome. This condition is generally satisfied if the result can be confirmed in a paper trail. For security purposes, Maine should insist that all votes be cast on a voter-verified paper ballot, as they are today.

Existing lockbox protocols for securing paper ballots should be retained.

Where central scanning is required, in order to preserve the chain of custody and the integrity of municipal records, scanning should be performed one municipality at a time, with a separate memory stick generated for each town. Ballots should be returned to the tamper-proof containers before scanning the next municipality. Ballots from different towns should not be commingled.

If ballots from the same hand-count town are required for both central RCV scanning and a non-RCV recount, the integrity of the lockbox should be maintained, and the contents of the lockbox should remain intact, with one operation completed before another operation begins. Presumably this would mean scanning for RCV first, then advancing the entire lockbox/municipality to the recount area.

Where necessary for hand-count towns to send their paper ballots to a central or regional scanning facility, ballots should be transported in their lockboxes by state police.

For machine-count towns, memory sticks should be transported by one- or two-day registered/certified mail (most secure available option per jurisdiction) in tamper-evident packaging by first- or second-day registered mail wherever possible, using the most secure and expeditious means available.

We recommend continued reliance on voter-verified paper ballots in RCV races, as is currently done for state and federal elections in Maine.

We recommend that lockbox protocols currently in place be retained. At the time when memory sticks are to be shipped for central counting, the warden and observers should be present to remove the memory stick and sign the lockbox activity log.

We recommend that the contents of the lockboxes never be commingled by town. Lockboxes that are needed for both central scanning and recount purposes should be opened for those purposes in sequential order.

We recommend state police escort for lockboxes with paper ballots sent for central scanning.

We recommend that memory sticks be transported in tamper-evident packaging by first- or second-day registered mail wherever possible, using the most secure and expeditious means available.

We recommend receipt verification of election material sent for central scanning and aggregation.

We recommend extending existing lockbox protocols and inventory management for memory sticks sent for central aggregation.
tamper-evident packaging. State police escort need only be used where there is no USPS or commercial courier option is available.

For both paper ballots and memory sticks, towns should check their retained ballot records against the results reported by the SOS and return an affirmation to SOS that these results agree:

- SOS should publish daily reports of towns whose election results have been delivered to the central scanning/counting facility and those still not received
- SOS should publish receipt of ballots by number cast within X days of receipt
- SOS should publish ballots cast per candidate for round 1 within Y days of receipt

There should be a secure, tamper-proof receptacle(s) at the central counting site for storage of memory sticks inventoried by town. Protocols for handling memory sticks and inventory should be functionally equivalent to those for ballots.
### Post-Election Night Reporting

To insure **timely** results, towns should send their election results to the SOS within 24 hours of the close of polls. For machine-count towns, that means that memory sticks should be post-marked the day after the election. For hand-count towns, election materials should be sealed in lockboxes ready for state policy transport by the end of the day after the election.

A confirmation count of ballot records/ballots sent to the central counting facility should be sent separately by the end of the day after the election. This could be sent by fax or email.

If these benchmarks are not met, the SOS should first call the delinquent town. If no satisfactory answer is received, SOS should send a messenger at town expense to collect the ballot records.

The SOS should provide an Election Results landing page for public **accessibility** and **transparent** display of election status.

- Town by town receipts of official and unofficial election results as described above
- Completed Races and On-Going Contests
- For Completed Races, the consolidated CVR by precinct in an accessible electronic format
- For On-Going Contests, results should be reported as standings by round with “No Winner to Report” clearly marking off the undecided contests.

- Best practices in election reporting should be identified during the implementation process and used to guide the

We recommend that towns be asked to submit their election results to the SOS for central processing within 24 hours of the close of polls on Election Day.

We recommend that the status of these returns be posted on a publicly accessible web site.

We do not insist on processing the rank/elimination rounds in a public setting for this initial implementation, but we recommend that some provision be made for limited public observation of the process.

We also recommend that the results be announced at the end of each rank/elimination round.

We do recommend online posting of key indicators of progress through the post-election period until the final, official election results are released.

We recommend that the entire electronic CVR be published by precinct in an accessible, electronic format as soon as assembled.

We recommend that preliminary results of rank/elimination rounds be made public as soon as at least 95% of ballots have been received, processed, and loaded into the consolidated CVR.
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<th>Causes of delays in reporting should be transparent to the public:</th>
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<td>● Report late delivery of election materials by towns</td>
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<td>● Report actions taken to resolve delays in the delivery of election materials</td>
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Note that it is possible for the number of paper ballots not yet received at the central scanning site to be less than the number required to change the outcome of the election. Only 5% of ballots are cast in hand-count towns. If only 2% of them are yet to be turned in AND the margin separating any candidate from any other candidate in any round is greater than 2%, we could proceed to rank/elimination processing without waiting for those missing ballots. Those results would, of course, be unofficial.
Recounts

Practical design for recounts under RCV depends on **transparency**. The complete, consolidated CVR must be published in electronic format accessible by candidates, political parties, and interested members of the public.

Current law permits any losing candidate to request a recount. In a ranked choice contest, we expect that most recounts will be requested by the candidate in second place, but recounts may occasionally be requested by candidates who were eliminated by a small margin before the final round and otherwise see a path to victory.

For the near term, we recommend application of current law to RCV recounts. Candidates may request a recount under the existing margin/deposit schedule. This would include cases where:

- The candidate was eliminated by a narrow margin in the final round.
- The candidate was eliminated in a previous round by a narrow margin and they might ultimately prevail.
- The candidate might have prevailed except that another candidate was erroneously eliminated from a prior round.

For **security** and chain-of-custody purposes, recount procedures should be designed so that the paper ballot contents of the lockboxes from different jurisdictions are never commingled for recounts.

We recommend that ballots from multiple jurisdictions s never be commingled for recounts.

Recounts requested by a candidate in the penultimate round will involve three candidates. Recounts in these races will involve validating the cast vote record for those three candidates and re-running the final rounds of rank/elimination processing with a corrected CVR if errors are found.

We recommend that recounts procedures for RCV contests be developed, tested, and published in advance of the election. (Note that we have conducted initial tests of recount procedures and can supply volunteers for further testing.)

We recommend that the full, consolidated CVR be published in electronic format accessible by candidates, political parties, and interested members of the public.

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For **security** and chain-of-custody purposes, recount procedures should be designed so that the paper ballot contents of the lockboxes are never commingled across towns. The recount should process one town at a time, comparing its contents to the CVR that was used for final rank/elimination processing. This requires that the CVR used for that purpose be capable of generating a report of cast vote records by town, by precinct, by race.
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<th>Training of Clerks</th>
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| Clerks should receive training and reference guides on how to address basic public questions in time for the availability of sample and absentee ballots for the election.  
Especially in this election, clerks should be instructed how to assist voters who ask for help filling out their ballot without venturing into questions of whether RCV is good policy or not.  
Clerks should be capable of explaining how to cast a vote, the reasons for or against casting a complete rank ordering, and the consequences of an overvote or an undervote.  
Clerks should be capable of giving a conceptual description of the method for counting RCV ballots.  
Clerks should be fully trained on any new procedures instituted for Election Night and subsequent handling of ballot materials and election outcomes.  
We recommend that municipal election officials be trained, not only on any new election procedures, but also on those aspects of RCV that will enable them to assist voters in casting an error-free ballot.  
We recommend that, especially for the 2018 primary, municipal election officials be carefully briefed on what they may or may not say about RCV in helping voters that could reflect on the voters’ disposition toward the people’s’ veto question. |

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<th>Audits</th>
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<td>We believe that an audit protocol is essential to consider for the future, but we do not recommend instituting mandatory, pre-certification audits in time for the 2018 elections.</td>
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