



Committee on Veterans and Legal Affairs
Maine Legislature
c/o Legislative Information Office
100 State House Station
Augusta, ME 04333
Via electronic portal

April 23, 2021

RE: Verified Voting Opposition to LD 1375 (HP 1009)

Dear Committee Members,

On behalf of Verified Voting, I write in opposition to LD 1375 regarding electronic ballot return. Verified Voting is a nonpartisan nonprofit organization with a mission to strengthen democracy for all voters by promoting the responsible use of technology in elections. Since our founding in 2004 by computer scientists, we have acted on the belief that the integrity and strength of our democracy rely on citizens' trust that each vote is counted as cast. It is with this in mind that we oppose allowing voted ballots to be returned electronically through insecure means, a dangerous practice that LD 1375 regrettably expands.

Multiple cybersecurity experts have concluded that internet voting is insecure. The National Academies of Sciences, Engineering and Medicine released a report in 2018 stating that the technology to return marked ballots securely and anonymously over the internet does not exist.¹ Additionally, in the lead up to the 2020 General Election, the Department of Homeland Security, the Election Assistance Commission, the Federal Bureau of Investigation, and the National Institute of Standards and Technology told states and election officials that electronic ballot return "creates significant security risks to the confidentiality of ballot and voter data (e.g., voter privacy and ballot secrecy), integrity of the voted ballot, and availability of the system. We view electronic ballot return as high risk. **Securing the return of voted ballots via the internet while ensuring ballot integrity and maintaining voter privacy is difficult, if not impossible, at this time** [emphasis added]."² Nothing has changed; no new internet technology has been created to mitigate this risk.

We must also point out that the actual device (e.g. smartphone) that voters cast their votes on has security vulnerabilities. The voter's device may already be corrupted with malware or viruses that could interfere with ballot transmission or even spread that malware to the

¹ National Academies of Science, Engineering, and Medicine, 2018. "Securing the Vote: Protecting American Democracy." Washington, DC: The National Academies Press. <https://doi.org/10.17226/25120>

² DHS Memo. <https://www.politico.com/f/?id=00000172-9406-dd0c-ab73-fe6e10070001>



computer at the elections office on the receiving end of the online ballot. Unlike other internet transactions, voting must simultaneously maintain ballot secrecy while still providing a verifiable record of the voter's intent. Internet voting does not allow the voter to verify that the record received by the elections office in fact reflects the voter's choices and thus those votes are not auditable.

Some argue that since we can bank on our smartphones then we should be able to vote securely using a smart device as well. As one Citibank executive put it, "not all smartphones are secure, and not all smartphones are secured in the same way. Financial institutions spend a lot of time and money protecting the accounts of their users. We work with phone vendors like Apple and Samsung on security. Are states or the federal government going to spend the same money we spend on security? Not likely."³

Blockchain does not solve the security issues inherent to internet voting.

The National Academies report states that "blockchain technology does little to solve the fundamental security issues of elections, and indeed, blockchains introduce additional security vulnerabilities." Blockchain technology is designed to keep information secure once it is received. It cannot defend against the multitude of threats to that information before it is entered in the blockchain, and voters cannot verify their votes are entered into the blockchain correctly without compromising ballot secrecy. Recording ballots on a blockchain also risks ballot secrecy if encryption keys are not properly protected or software errors allow decryption of individual ballots.

We realize that Maine UOCAVA and voters with disabilities are currently permitted to return their voted ballots electronically. We regard this as a dangerous precedent to be reversed, not expanded. Maine traditionally has one of the highest turnout rates for elections. Trying to increase voter turnout by bolstering electronic ballot return is misguided when the risks far outweigh the reward.

At a time when election security and public confidence are under attack, electronic return of voted ballots presents a slippery slope to vulnerable and untrustworthy elections. We therefore urge that LD 1375 be rejected.

Respectfully submitted,

Mark Lindeman
Acting Co-Director

³ Dan Patterson, "Why Can't I Vote on My Phone?," CBS News (CBS Interactive, November 2, 2020), <https://www.cbsnews.com/news/why-cant-i-vote-on-my-phone/>

