Dear Chair Kaiser, Vice Chair Washington and Committee Members:

Maryland was one of the last states to finish counting its ballots in 2020, largely because of internet-delivered ballots. Maryland only finished on November 23, even though it was allowed to start processing its absentee ballots on October 1, the earliest date among the states. Unlike Maryland, almost all other states limit internet-delivery of blank absentee ballots to military, overseas voters and voters with disabilities.

Each internet-delivered ballot must be hand copied onto a traditional paper ballot to be scanned, resulting in delayed results, increased costs for counties and potential inaccuracies. In 2020, anticipating the large increase in absentee ballots and the enormous workload to hand copy the internet-delivered ones, the SBE discouraged voters from requesting internet-delivered ballots through voter outreach: "*Get Your Ballot Sent by Mail, Not Email, to Save Time and Money* ... Receiving your ballot by mail is free and more convenient than receiving it by email," said Linda Lamone, Administrator of the State Board of Elections. "To save time and money, request that your ballot be mailed. This will also make Maryland's vote counting process more efficient because local election judges will not have to hand copy ballots."<sup>1</sup> The voter outreach campaign reduced the percentage of absentee voters requesting internet delivery from 36% in 2018 to 10% in 2020. But there were still 163,907 internet ballot delivery requests in 2020 compared to 55,988 in 2018.<sup>11</sup>

The large number of ballots that must be hand-copied in a very short time creates opportunities for error or tampering. If the remade ballot does not accurately reflect the voter's choices, the voter will never know, and Maryland's current audits will not detect this type of discrepancy. These voters never see the ballot that is cast for them.

**Internet ballot delivery may decrease voter participation.** Voters who receive their ballots online are about 12% less likely to return their ballots than those who receive traditional paper absentee ballots by mail, which come with a return envelope.<sup>iii</sup>

Large-scale absentee ballot fraud is far simpler to accomplish with ballots delivered over the internet than with paper ballots mailed to brick-and-mortar addresses. One smart hacker with resources could attack Maryland's online ballot delivery system on a large scale without detection.<sup>iv</sup> Limiting usage is key to reducing the attack surface.

The credentials needed to impersonate Maryland voters are on the internet. Top computer scientists have repeatedly warned that the wide availability of credentials (social security number, date of birth, driver's license number...) makes Maryland's system extremely vulnerable. The U.S. Senate Intelligence Committee Report on Foreign Interference indicates that the necessary credentials have already been collected by Russia. Voters' email addresses have also been collected.<sup>v</sup> Bad actors can use voters' credentials to impersonate voters and:

- Register unregistered voters and then request and vote their absentee ballots.
- Intercept emails sent to voters who requested internet-delivered absentee ballots and vote their absentee ballots.
- Request absentee ballots for registered voters to be sent to fake email addresses. If those voters vote at a polling place, they would have to vote provisionally, creating chaos. If a fraudulent absentee ballot and provisional ballot were both received, the real voter could be disenfranchised.
- Spoof the board of elections and email incorrect links to voters.

## Maryland's SBE cannot prevent, and may not even detect, an attack.

When Russian attackers probed Maryland's online voter registration and online ballot delivery system in 2016, the attack was not detected for weeks. In addition, for 13 months in 2017 the SBE did not receive 80,000 voters' change of addresses from the MVA because of a bug in the programming. The SBE detected the problem, only by chance, 3 days before the 2018 primary.

**Risks of internet delivery outweigh benefits.** HB955 reduces the impact of an attack and workload without reducing participation. This bill will allow online delivery of absentee ballots to voters who need them, while still allowing all voters the convenience of using the online tool to request absentee ballots that, in most cases, would be sent to them by mail.

Please safeguard Maryland's elections and support HB955.

## Lynn Garland Independent Advisor on Voting Systems Security and Accuracy Bethesda, Maryland

<sup>&</sup>lt;sup>iii</sup> STATEWIDE RETURN RATE OF ABSENTEE BALLOTS IN MARYLAND

	Ballots sent by mail	Ballots sent electronically	Difference
2016 primary	76.45 %	62.55%	13.90%
2016 general	82.03%	70.98%	11.05%
2018 primary	72.92%	58.71%	14.21%
2018 general	81.29%	69.55%	11.74%

No data is yet published for 2020. The 2016 and 2018 figures are from a Jan 3, 2019 email from Erin Peronne. Throughout the states, "Contrary to expectations of many in the election community, the preliminary data indicate that in most states (11 of the 16 respondents) electronic ballots had lower return rates."

(https://www.overseasvotefoundation.org/files/OVF research newsletter 2013 summer corrected.pdf page 3)

<sup>iv</sup> NIST IR 7711, Sept 2011, "Security Best Practices for the Electronic Transmission of Election Materials for UOCAVA Voters": "In most cases, any mechanism used to remotely authenticate voters will serve as a secondary method to authenticate returned ballots, with voter signatures generally providing the primary mechanism to authenticate returned ballots."

<sup>v</sup> Excerpts from an alleged leaked NSA document indicate that the hackers might have been exploring vulnerabilities associated with online delivery of absentee ballots. The top of the leaked document says:

"Russia/Cybersecurity: Main Intelligence Directorate Cyber Actors...Research Absentee Ballot email addresses."

<sup>&</sup>lt;sup>i</sup> SBE Voter Outreach, September, 2020, "Get Your Ballot Sent by Mail, Not Email, to Save Time and Money"

<sup>&</sup>lt;sup>ii</sup> https://elections.maryland.gov/press\_room/2020\_stats/Mail-in%20Ballot%20Request%20Counts%20with%20Chart.pdf