Verified Voting

What to Ask When New Election Technology is Introduced

When state or local election officials introduce new or upgraded election technology (including voting machines, electronic poll books, and mobile apps), you may have questions as a constituent. You may have concerns about the cost of technology, the accessibility of the technology, the transparency of the technology, the technology procurement process, or the security of the technology. While not intended to be a comprehensive list, these questions are a great starting point for you to engage with your local election officials on the importance of rolling out new voting technologies effectively.

1. **What is the back-up plan, if the new technology fails?**
   Technology can fail for any number of reasons, including poor design or human error. In elections, people who are inconvenienced -- or worse, disenfranchised -- generally have very little recourse, as elections happen infrequently, and do-overs are rare and expensive. Election officials experience problems with technology every Election Day, from missing extension cords to unintentional human programming errors. Verified Voting advocates for resilient elections (read more here) and the responsible introduction of technology must include a back-up plan in case of failure. For example, jurisdictions that rely on electronic voting machines should always have emergency paper ballots as a back-up voting method in case the technology fails. In your state, county or local area, how are your election officials preparing for worst-case scenarios?

2. **How will you ensure poll workers are ready to use the new voting system or technology?**
   Election officials should have a robust plan for training poll workers so they can 1) set up the new system and have it fully operational before the polls open, and 2) appropriately troubleshoot any issues that arise on Election Day. Poll workers are often the first line of communications to election officials if something goes wrong, and they need clear guidelines on how to report problems and implement the back-up plan as quickly as possible.

3. **Is the new technology accessible for all voters?**
   Some voters cannot use different types of voting technology and must have accessible and assistive options available to cast their votes. Poll worker training is particularly important for setting up and using these types of devices. Studies have shown that "untrained poll workers have discouraged the use of accessible voting machines, leaving voters with disabilities behind." All accessible components of voting systems must be set up and powered on when

the polls open; poll workers should be trained on how to use the systems should a voter need assistance; and they must offer the same level of voting privacy as other voters experience.

4. **Will there be a public test and will there be an open invitation to security experts to attempt a hack of the system?**
Many security experts are interested in elections and willing to donate significant resources to "white hat hacking", i.e., helping to find system vulnerabilities. Without an invitation, however, probing an election system for vulnerabilities is illegal. Responsible introduction of technology should include a trial run, where permission is given to test the system for vulnerabilities. For example, Washington DC ran a public trial of an internet voting system in 2010. They held a mock election and invited anyone who wished to try to break into the system, and a team from the University of Michigan discovered the system's vulnerabilities. The exercise resulted in the insecure system being scrapped by the jurisdiction.

5. **How is your jurisdiction checking after each election to confirm that the computers performed correctly?**
Security experts recommend that each election should be audited using voter-marked paper ballots - hard evidence of the actions voters took while expressing their preferences. The preferred auditing method is a risk-limiting audit (RLA). RLAs are a type of post-election audit which gives statistical evidence that the computer-tabulated results are consistent with what a full hand-to-eye count - people looking with their eyes at ballots held in their hands - would reveal.

What can you do?
Ask your local election officials these questions. Attend public hearings and voting equipment demonstrations. Become an Election Day observer or a poll worker. These are just a few ways you can get involved to help ensure our elections are safe and secure.

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