

Appendix H

Elections Cybersecurity

Election cybersecurity or election security refers to the protection of voting infrastructure. This includes tampering with or infiltration of the systems and practices used to administer elections. Such equipment includes, but is not limited to, the voting systems used to mark and tabulate ballots as well as voter registration systems that hold the information about those eligible to vote (aka access the voting system).

This educator resource is designed to teach students about the various types of equipment and systems in use, as well as the security procedures in place to protect the systems used by election officials.

In the classroom, students might try the following:

- As a class, have students discuss how they think voting equipment might be maliciously accessed. Write down these ways and then have students research the feasibility of their perceived methods. Require students to find credible sources for this information, such as documents published by local or state election officials, or call/visit the local election office to find out more about existing procedures.
- Have students determine if cybersecurity is one-dimensional. In other words, is cyber security limited to electronic equipment, or does it expand to hardware, or physical security procedures and practices? Have students research whether voter registration systems are connected to the internet. If so, how? What about voting systems? Are voting machines and ballot tabulators connected to the Internet? If not, why not?
- In 2017, the U.S. Department of Homeland Security established a new role for the federal government in securing elections by designating election infrastructure as Critical Infrastructure. Have students research “Critical Infrastructure”, assign student groups to research a specific sector and report back to the class why the sector is designated as Critical Infrastructure.
- Divide students into small groups. Have students research common computer cybersecurity practices. Have students work with your school technology staff to determine whether or not your school utilizes these practices and why or why not.
- Assign students a state to research the election cybersecurity procedures and practices. Students can report back to the class what their state does as well as identify best practices and weaknesses across states.