U.S. ELECTION COMMISSION

Quick Start
MANAGEMENT GUIDE

TECHNOLOGY IN ELECTIONS

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www.eac.gov

The Quick Start Management Guide on Technology in Elections is part of a series of brochures designed to highlight and summarize the information contained in the chapters of the U.S. Election Assistance Commission's (EAC) *Election Management Guidelines (EMG)*. The goal of the EMG is to provide a collection of administrative practices, consolidated into one document, to assist State and local election officials to effectively manage and administer elections. These guidelines are designed solely to serve as a source of information for election officials. However, due to the need for election management resources, Quick Starts are released as they are completed.

The content of the EMG and the Quick Start Management Guides has been developed in collaboration with State and local election officials and other election professionals who have first-hand experience managing elections. The EAC is grateful for their participation to ensure that the guidelines are practical and applicable for jurisdictions regardless of their size and resources. The EMG and the Quick Starts are available online at www.eac.gov.

Introduction

- Voting has changed over the years. While Americans may have made selections for office by voice vote in the past, voters now use optical scan machines, paper ballots, and direct recording electronic (DRE) voting machines to cast ballots today.
- The technology for administering elections has changed as well. States have implemented statewide electronic voter registration databases to manage their voter rolls. Many jurisdictions have incorporated new technologies into their processes and procedures in order to administer elections more efficiently.
- Advances in technology can yield great benefits to those who use them correctly. The Quick Start Management Guide on Technology in Elections aims to make these advances accessible to election officials across the country, by explaining innovative uses for technology in the elections office and the voting process. The Guide also includes tips for how to manage cost, maintenance and replacement of technology.

Technology in the Elections Office

- Voter registration can overwhelm an elections office's resources, especially as the registration deadline nears. Much of the time involved in registering new voters or making address adjustments is taken up by data entry from handwritten paper records. Some States transfer registration data electronically from the State's motor vehicle agency to the elections offices. These activities can be accomplished via real-time transfer or by using a form

of batch input (i.e. accumulating registration data over a period of time into a 'suspense queue' and updating the registration files in batches). By receiving registrations electronically, election officials can save valuable time in registering Americans to vote while reducing potential errors encountered during the manual transfer of data.

- States are exploring online voter registration and registration updates. In some of these systems, the voter can make all of the changes to their registration file. In others, States still require the information in paper form, but they allow the voter to input the information electronically.
  - In 2008, Washington and Arizona allowed voters with State-issued licenses or ID cards to register or update their registration files from a home computer. The individual's digital signature on file with the department of motor vehicles is used for the voter registration form.
  - Florida provides a registration form online in a fillable portable document format (PDF). The form is filled out online; the form is then printed, signed by the voter, and returned to the election office. The Florida fillable registration form is unique in that the elections office receives the data entered by the voter into the fillable form electronically. When the printed and signed registration form arrives at the elections office by mail, there is no additional data entry to do.

- Some jurisdictions are making an effort to digitize their records. Electronic scanners are used to capture and digitize voter signatures, paper correspondence and registration records, which can then be linked to individual voter files. This technology may be prohibitively expensive for many small jurisdictions.
- Jurisdictions are using Geographical Information System (GIS) software for many different purposes:
  - The software can be used to update the voter registration software street index and precinct information after the census redistricting.
  - A few jurisdictions on the cutting edge of technology track the opening and closing of the polls through GIS. Each precinct chief poll worker calls into a call center with a unique code after the poll has opened on Election Day. The GIS system alerts the election official as to which polls are open and which are having problems.
  - The technology is also being used to track from where voters come during early voting. This tracking allows election officials to efficiently place early voting sites or even to consolidate polling places.
- Jurisdictions might use Content Management Systems (CMS) to manage work flow in the elections office. A CMS can be paper-based manual or computer-based software designed to:
  - Allow office staff to contribute to and share stored data;

- Control the information each user can view or edit;
- Aid in easy storage and retrieval of data;
- Reduce repetitive or duplicative input;
- Improve the ease of report writing;
- Improve communication among office staff.

- A CMS can be built in-house, purchased off the shelf, or contracted out to a vendor. Most vendors offer a Content Management System that is publicly available and transferrable to other vendors if the election official switches to a different vendor in the future.

- The Internet can be an inexpensive tool for election officials as they reach out to all voters, but especially to younger voters who receive the majority of their information online.
  - Consider implementing an electronic newsletter as a method of disseminating election-related information.
  - Election officials might appoint a staff member in the election office who is familiar with social networking websites including Twitter and Facebook to provide information to voters.
  - When designing web-based information systems, election officials should keep in mind that many voters either do not have access to the web or are not skilled in using the web. Any information available via the web should also be available via other means. Election

officials may also find it useful to review their web-based information systems for usability and accessibility.

– For additional information and suggestions see chapter 14 of the Election Management Guidelines, Communicating with the Public.

Technology in Voting

- Consider using project management software to administer elections. Many jurisdictions call this their election management system (EMS).

  – There are numerous free project management solutions available via the Internet.

- Some jurisdictions and some States track absentee ballots electronically. The ballot is scanned at various points during its life cycle, which creates a record of where the ballot has been. Jurisdictions with high rates of absentee voting use ballot sorting machines to sort incoming and outgoing ballots into precincts.

  – Some sorting machines can be linked to the voter registration database to facilitate matching voters' signatures. The signature match is not 100% accurate, though. Most systems are set to flag suspect signatures for further manual evaluation.

- For additional information and suggestions see chapter 7 of the Election Management Guidelines, Absentee Ballots.

- The Uniformed and Overseas Citizens Absentee Voting Act (UOCAVA) of 1986, as amended, ensures the rights

of absent Uniformed Services voters and overseas voters to register to vote and cast absentee ballots for Federal offices. (See EAC Election Management Guidelines, Chapter 8, Uniformed and Overseas Citizens)

- The Federal Post Card Application and the Federal Write-in Absentee Ballot include areas for the voter to provide an e-mail address. Election officials can use these e-mail addresses to establish an e-mail connection with their UOCAVA voters so that they may be able to update the elections office concerning address changes.
- Use this e-mail connection to send out information, schedules, sample ballots, etc.

- If a jurisdiction incorporates ballot on demand, it can be used to produce ballots for UOCAVA voters without having to wait for receipt of the bulk-printed ballots. This feature can help jurisdictions incorporate the new 45-day window for mailing UOCAVA ballots.
- Radio-frequency identification (RFID) chips can be used to track equipment or supplies. In jurisdictions using this technology, a chip is placed in every supply box and the boxes pass through a special tunnel to record its deployment and return. The technology makes it easier to see which polling places/precincts have not yet returned their materials at the end of Election Day.
- GPS technology can be used to track drivers as they deliver equipment and supplies to the polling places or transport election results from the

precincts to the central office. This tracking information (i.e. start and arrival times) should be recorded and maintained as part of the election audit materials.

- Some phone companies provide wireless telephone service to election offices for their polling places at reduced costs. Election officials should check with their local providers.
- Electronic poll books are an option that can be used to replace paper lists of registered voters in polling places and at early voting locations.
  - Electronic poll books can assist with accommodating provisional voters by efficiently determining whether or not the voter is registered in another precinct.
  - Electronic poll books that contain state-wide voter registration lists can assist election officials in determining if a voter is registered in another county.
  - Some electronic poll books include peripherals with the capability to swipe a driver's license or coded voter registration card to facilitate the check-in process and eliminate transcription errors.

Voting Systems

- The EAC has published Voluntary Voting System Guidelines for testing and certifying voting systems. A complete copy of these guidelines, a list of certified voting systems, and additional information about the program is available at www.eac.gov.
- Prior to purchasing a voting system, jurisdictions should check the State's

requirements for certification. Most States require:

- Federal certification and/or
- State certification. State-level tests generally are designed to assure that the voting system complies with State laws and regulations.
  - The State election office can provide local jurisdictions with a list of voting systems that are certified for use in the State.

- In addition to Federal and State certification requirements, many jurisdictions conduct acceptance testing on newly acquired voting systems and components. For a description of acceptance testing see chapter 4 of the Election Management Guidelines, Acceptance Testing.
- Local colleges and universities might be a resource for certifying and testing voting systems. For additional information see chapter 12 of the Election Management Guidelines, Building Community Partnerships.

Cost and Replacement

- Voting systems are not designed to last forever. Election officials might consider long-term planning for replacement in discussions with the jurisdiction's budget authority.
- It is essential that the election official understands exactly what is, and is not, covered by the vendor's maintenance and licensing agreements.
- Consider developing a Standard Technical Operating Procedures (STOP) manual for your office. The STOP manual includes flow charts

documenting every process in the elections office that involves technology: ballot layout, processing provisional ballots, vote by mail, poll worker training, etc.

  – Eventually the STOP manual will document every technical aspect of the elections process to ensure continuity of operations.

- Include the serial numbers and expected life spans of each piece of equipment in the office, as well as when it was purchased, serviced, and updated; and the cost.

For information regarding this publication or to request additional copies, please, contact:

Address
U.S. Election Assistance Commission
1201 New York Avenue, NW, Suite 300
Washington, DC 20005
Attn: Election Management Guidelines

Telephone
(202) 566-3100
(866) 747-1471 (toll free)

Fax
(202) 566-3127

E-mail Address
HAVAinfo@eac.gov

Website
www.eac.gov

The EAC is an independent bipartisan commission created by the Help America Vote Act of 2002 (HAVA). It is charged with administering payments to states and developing guidance to meet HAVA requirements, implementing election administration improvements, adopting voluntary voting system guidelines, accrediting voting system test laboratories and certifying voting equipment and serving as a national clearinghouse and resource of information regarding election administration.