Voting Technology in the St. Louis Region

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Passage of the Help America Vote Act of 2002 (HAVA), a federal law designed to reform election procedures, has forced state and local officials to consider dramatic changes in voting methods and election administration. Among other things, the law requires election officials to provide access to voters with disabilities at every polling place and adopt “second-chance” voting methods that help voters identify and correct mistakes. The federal government recently appropriated roughly $1.5 billion to help states replace old voting equipment and make other election changes to meet the requirements of HAVA.

The move to replace older voting equipment was partly inspired by the 2000 presidential election and the recount controversy in Florida, which brought to light the phenomenon of unrecorded votes (the difference between the total number of voters who go to the polls and the number of valid votes cast in a particular contest). Studies indicate that some ballots are disqualified because of voter errors resulting from confusing ballots or from complicated or defective voting equipment.

In the St. Louis region, most jurisdictions still use outdated punch card ballots. Punch card voting is more common in Missouri and Illinois than anywhere else in the country. Punch card ballots produce a higher rate of unrecorded votes than any other voting method. There are two newer voting methods that are being considered as replacements for punch cards: optical scan voting systems and electronic voting machines. In optical scan systems, voters use a pen or pencil to color in a circle next to the candidate’s name on a paper ballot and then the ballot is fed into a scanning machine to be counted (as in many standardized tests). In “precinct-count” optical scan systems, the voter immediately places the ballot into the scanner at the polling place, which provides a second-chance opportunity for voters to discover and correct any ballot errors. In “central count” optical scan systems, ballots are counted at a central location after polls close and thus offer voters no error correction mechanism.

Usually, each county chooses its own voting equipment. The map on the following page indicates the voting equipment used in each jurisdiction in the St. Louis region. Currently, no jurisdiction in Missouri or Illinois uses electronic voting machines. Missouri only recently passed legislation allowing them to be used, and Illinois has yet to follow suit (but is expected to do so soon). Madison
County, Illinois uses a precinct-count optical scan system and is the only jurisdiction in the region that currently satisfies HAVA’s requirement to offer second-chance voting.

Electronic voting machines are relatively new in the United States. They tend to resemble ATM machines, in which voters cast their votes on a computer screen. Some electronic voting machines have a full-face layout and push-button interface (patterned after old lever voting machines) in which the voter sees the entire ballot on one screen or canvass at once. The newest generation of electronic voting machines has a touch-screen interface and a scrolling layout, in which the computer screen scrolls through the ballot one contest at a time. Electronic voting machines are usually programmed not to accept ballot errors (such as voting for too many candidates) and thus have a built-in second chance mechanism.

Election officials in the St. Louis region have yet to choose new voting technology. As local election officials consider replacing punch card balloting with new voting equipment, there are some important issues they should consider. First, not all new voting methods perform the same when it comes to unrecorded votes. The older full-face electronic voting machines tend to produce significantly more unrecorded votes than newer touch-screen electronic machines. In addition, central-count optical scan systems produce significantly more unrecorded votes than precinct-count optical scan systems, which have the second-chance mechanism. While full-face electronic machines and central-count optical scan systems still perform better than punch cards, precinct-count optical scan systems and touch-screen electronic machines are the best in terms of minimizing unrecorded votes. Also, most electronic voting machines do not produce a paper ballot that can be retained in case of a recount or audit. This has been a matter of concern for some election officials and researchers. The newest electronic voting machines are created to produce some type of paper trail. It is also important to note that there tend to be higher levels of unrecorded votes in Illinois than in Missouri, partly because Missouri has a straight-party punch on the ballot and Illinois does not.

Second, new voting machines do not come cheap. New electronic voting machines have a cost of roughly $10,000 to $25,000 per precinct (depending on the make and model used). Precinct-count optical scanning machines cost roughly $4,000 to $6,000 per precinct. With optical scan voting systems, local election officials will also need to pay for printing ballots each election. If the HAVA program is fully funded by the federal government, states and counties hope to receive roughly $4,000 per precinct to replace punch card ballots. Thus, federal funds probably will not cover the entire cost of purchasing new voting equipment. Illinois hopes to receive $30 million to $34 million from the federal government to replace punch card ballots. Missouri hopes to receive a little less than $20 million. Both states met a recent deadline to notify the federal government of their intent to participate in a voluntary effort to replace punch card voting. Given the difficult fiscal situation facing state and local governments, some counties are not ready to buy new voting equipment unless the state or federal government can pay for most or all of the cost. The St. Charles county clerk indicates that he is not willing to spend any county funds to replace punch cards. Other counties have started merging or eliminating some polling places in order to reduce the new voting machines they will need to purchase.

In addition, there appears to be a split between urban and rural counties in preferences for new voting equipment. Smaller rural counties tend to prefer optical scan systems because of the lower up-front costs. Large urban counties tend to prefer electronic voting machines, which can better handle a long ballot with many contests. Also, printing costs for optical scan ballots can be quite high in counties with a lot of voters. Finally, electronic voting machines are more accessible to voters with disabilities. Issues relating to cost and performance will be important as local election officials make decisions about voting equipment in the next year.
**Current Voting Equipment in the St. Louis Region**

**Voting equipment**
- Votomatic punch
- Central scan
- Precinct scan

*Livable* communities don’t just *happen*. They are *created* by the *people* who *live* in them.