Voting in Fort Bend County

Since 2005 voters in Fort Bend County have cast their votes on the Hart eSlate Voting System

What is a Voting System?

A voting System is a combination of Hardware, software & firmware, and electronic equipment used to:

1. Define ballots
2. Cast & count ballots
3. Report & display Election Results
4. Maintain and produce an audit trail

Voting Systems integrate with other systems

- Voter Registration and Election Management System
- Electronic Pollbooks
- Absentee System
- UOCAVA ballot delivery system
- Election Night Reporting system

What is an eSlate?

- An eSlate is the trade name for a Direct Recorded Electronic (DRE)

  DRE voting system

- Offices, candidates, & propositions are displayed on a screen and voters make their selections and votes are recorded and stored in system.

- It is not a touch screen since voters navigate the screen by using buttons and a wheel.

The eSlate system has multiple components

Our current system consists of 1114 eSlate terminals and booths and an additional 200 Disabled Access terminals (DAUs)

The System also uses a Judges Booth Controller to issue access codes which will provide voters with the correct ballot for any given election

The eSlate terminals are hard wired to, and communicate with, the JBC. Votes totals are stored in the JBC and on removable media.

Our eSlate System was originally purchased in July 2005

- Initially we acquired 625 eSlates, 155 DAU's 160 JBC's, Software and a central tabulation system for absentee ballots at a cost of $2,656,770 of which $1,906,770 was reimbursed under the Help America Vote Act (HAVA)
- In August 2006 we purchased an additional 50 eSlates at a cost of $141,310
- In November 2007 we purchased 210 used JBC's at a cost of $421,360
- In July 2008 we purchased 440 eSlates for $1,336,200.
- In February 2011 we used a final allocation $162,384 of HAVA funding to buy 45 DAU's
- Between 2005 and 2011 we purchased 1,315 voting units and 365 JBC's at a cost of $4,700,024.

eSlate System is subject to annual software and firmware license fees and other costs

- Initially, we annually paid $84,344 in Software and firmware license fees
- In 2018 we paid $183,500 in License fees on our voting system
- We have never had a hardware maintenance agreement on the eSlate system the cost of which would be comparable to the SLA fees
- Most equipment is repaired internally; however, repairs to motherboards or screens are done by the vendor.

We currently have equipment in need of repair

- Of our 1114 eSlates, 24 need repair
- Of our 200 Disabled access units, 29 need repair
- Of our remaining 340 JBC’s, 8 have been cannibalized for parts and 10 are in need of depot repair.

Equipment failure and repair rates have been rapidly increasing since 2016

America has a very decentralized system of voting

There are a variety of systems designed to meet the needs of various states and localities which are influenced by:

- State Laws
- Equipment Certifications
- Size of Jurisdiction
- Percentage of voters casting Early Ballots
- Percentage of voters casting absentee ballots by mail
- Language Requirements
- Who conducts each election, i.e. county, city, etc

Other factors influence the choice of a Voting system

- License Fees
- Maintenance costs
- Programming costs
- Ballot costs
- Warehousing costs
- Delivery Costs
- Security

The legal environment has a great deal of impact on choosing a voting system

- Open Primary Elections require more flexibility as Election Official don’t know in which parties Primary voters will participate
- Timing of Presidential Primaries also influence turnout
- Straight Party voting options impact the time that voters typically take to mark a ballot

A Variety of different voting platforms exist

- Paper Ballots counted by hand in precinct
- Paper Ballots counted by machine centrally
- Paper Ballots counted by machine in precinct
- Electronic Ballots (DRE)
- Hybrid systems

Paper Ballots

Advantages

- Suited to small jurisdictions or small elections
- Instills voter confidence
- Easy to audit

Disadvantages

- Not ADA compliant
- Most susceptible to vote fraud
- Limited error detection
- Different languages require different ballots
- Lots of waste, especially in Primary elections

Optical Scan Paper Ballot Systems use two platforms

Precinct Count Systems can provided error detection for overvotes

With Central Count systems, uncounted ballots are transported to Counting Center

Newer Versions of Precinct scanners are smaller and more accurate

ES&S M-100

Hart eScan

Direct Recorded Electronic

Advantages

- Scalable to jurisdiction size
- ADA compliant
- Can support multiple languages
- Supports multiple ballot styles
- Minimal paper costs
- Least Expensive to operate

Disadvantages

- May not be legally sustainable
- Greater initial purchase cost
- Voter and media concerns about safety and accuracy

Touch Screen technology is employed in most DRE systems

Voters make choices pn the screen and votes are stores internally

DRE's can have scalable fonts and may be audion enabled

Some systems are equipped with a Voter Verified Audit Trail

DRE's can support multiple languages

Hybrid Voting Systems

Advantages

- Scalable to jurisdiction size
- ADA compliant
- Can support multiple languages
- Supports multiple ballot styles

Disadvantages

- More Equipment Required
- Greater initial purchase cost
- Recurring Paper costs
- Voter must mark ballot then carry ballot to tabulator
- Additional storage and preparation space required

Hybrid Systems function like a DRE but produce a paper ballot

A voter inserts a ballot card into the device, a poll worker selects the ballot style, and a marked ballot is returned to the voter

The ballot card is then deposited into a precinct scanner where it is tabulated

Hybrid Voting systems are produced by several manufacturers

Hart Verity Duo has received EAC certification and the company has applied for state certification

Unisyn FreedomVote wa sthe first system certified to 20