

Highlights of [GAO-08-97T](#), a statement before the Task Force on Florida-13, Committee on House Administration, House of Representatives

## Why GAO Did This Study

In November 2006, about 18,000 undervotes were reported in Sarasota County in the race for Florida's 13th Congressional District (FL-13). After the contesting of the election results in the House of Representatives, the task force unanimously voted to seek GAO's assistance in determining whether the voting systems contributed to the large undervote in Sarasota County. GAO agreed with the task force on an engagement plan, including the following review objectives:

- (1) What voting systems were used in Sarasota County and what processes governed their use?
- (2) What was the scope of the undervote in Sarasota County in the general election? (3) What tests were conducted on the voting systems in Sarasota County prior to the general election and what were the results of those tests?
- (4) Considering the voting systems tests conducted after the general election, are additional tests needed to determine whether the voting systems contributed to the undervote? To conduct its work, GAO met with officials from the State of Florida, Sarasota County, and Election Systems and Software (ES&S)—the voting systems manufacturer—and reviewed voting systems test documentation. GAO analyzed election data to characterize the undervote. On the basis of its assessments of prior testing and other activities, GAO identified potential additional tests for the Sarasota County voting systems.

To view the full product, including the scope and methodology, click on [GAO-08-97T](#). For more information, contact Keith Rhodes at (202) 512-6412 or [rhodesk@gao.gov](mailto:rhodesk@gao.gov), or Naba Barkakati at (202) 512-4499 or [barkakatin@gao.gov](mailto:barkakatin@gao.gov).

October 2, 2007

## ELECTIONS

### Further Testing Could Provide Increased but Not Absolute Assurance That Voting Systems Did Not Cause Undervotes in Florida's 13th Congressional District

#### What GAO Found

In the 2006 general election, Sarasota County used voting systems manufactured by ES&S, specifically iVotronic direct recording electronic (DRE) voting systems during early and election day voting and the Unity election management system, which handles the election administration functions, such as ballot design and election reporting.

GAO's analysis of the 2006 general election data from Sarasota County did not identify any particular voting machines or machine characteristics that could have caused the large undervote in the FL-13 race. The undervotes in Sarasota County were generally distributed across all machines and precincts.

GAO's analysis found that some of the prior tests and reviews conducted by the State of Florida and Sarasota County provide assurance that certain components of the voting systems in Sarasota County functioned correctly, but they are not enough to provide reasonable assurance that the iVotronic DREs did not contribute to the undervote. Specifically, GAO found that assurance is lacking in three areas, and proposes that tests be conducted to address those areas. First, because there is insufficient assurance that the firmware in all the iVotronic DREs used in the election matched the certified version held by the Florida Division of Elections, GAO proposes that a firmware verification test be conducted on a representative sample of 115 (of the 1,499) machines that were used in the general election. Second, because an insufficient number of ways to select a candidate in the FL-13 race were tested, GAO proposes that a test be conducted to verify all 112 ways that GAO identified to select a candidate. Third, because no prior tests were identified that address the effect of a miscalibrated iVotronic DRE on the undervote, GAO proposes that an iVotronic DRE be deliberately miscalibrated to verify the accurate recording of ballots under these conditions. GAO expects these three tests would take 2 weeks, once the necessary arrangements are made.

Should the task force ask GAO to conduct the proposed tests, several matters would need to be addressed before testing could begin, including obtaining access to the iVotronic DREs that have been subject to a sequestration order, arranging for a test site, obtaining some commercially available test tools, developing test protocols and detailed test procedures, and arranging for the video recording of the tests. Sarasota County election officials have indicated that they can help GAO access the machines and provide a test site between November 26 and December 7, 2007.

Although the proposed tests could help provide increased assurance, they would not provide absolute assurance that the iVotronic DREs did not cause the large undervote in Sarasota County. The successful conduct of the proposed tests could reduce the possibility that the voting systems caused the undervote and shift attention to the possibilities that the undervote was the result of intentional actions by voters or voters that did not properly cast their votes on the voting system.