Ballot programming maps votes to candidates. Flaws cause votes to be counted wrong, often leaving totals unchanged. Voting machine vendors do the ballot programming for most jurisdictions in the U.S.

Map #	Date	Machine	Place/Description
1	June 2006	ES&S Optical Scan (M-100)	Pottawattamie County, Iowa. Ballot programming error by ES&S causes new optical scanners to tabulate votes incorrectly. ¹
			Things began to look fishy, [Pottawattamie County Auditor Marilyn Jo] Drake said, when the county's new computers counted the absentee ballots in the Republican Party's county race between longtime Recorder John Sciortino and newcomer Oscar Duran.
			Absentee ballots are the ones counted first.
			When all of those were counted, Duran, a University of Nebraska at Omaha student, had 99 votes, while Sciortino, the county recorder since 1983, had just 79.
			Drake said she decided to count the absentee ballots by hand to determine if the computers were counting correctly.
			They weren't - not by a long shot.
			The actual absentee ballot count in the recorder's race when done by hand found Sciortino had 153 votes and Duran just 25.
			It was then that she decided to stop the computer counting in all the races.
			"They could be tainted, we don't know," Drake said.
2	June 2006	ES&S AutoMark	Dallas County, Iowa. ES&S mis-programmed the ballots on the AutoMark. The review screen didn't match the marks on the paper ballot. ²
			[Charles Krogmeier of the Secretary of State's staff] told VoteTrustUSA that a professor from Drake University asked to use the AutoMark machine when he voted. He went through the ballot, marking his choices, and when he was through he checked the ballot to find that one race had been swapped.

(Map Handout)

¹ Faulty voting machines delay results; counting under way. The Daily Nonpareil Online. June 7, 2006. by Tim Rohwer, Staff Writer. http://www.zwire.com/site/news.cfm?newsid=16751509&BRD=2703&PAG=461&dept_id=555106&rfi=6

² Too Much, Too Fast, More Than They Can Chew. VoteTrustUSA. June 9, 2006. By John Gideon. http://www.votetrustusa.org/index.php?option=com_content&task=view&id=1378&Itemid=51

Map #	Date	Machine	Place/Description
3	June 2006	ES&S	White County, Arkansas. ES&S provides flawed ballot programming for the touch screens. ³
		iVotronic	After initial problems with the county's new iVotronic electronic voting machines — including faulty electronic ballots, that forced the use of homemade paper ballots in early voting — White County Clerk Tanya Burleson said ballots in today's runoff will be cast electronically as originally planned.
4	May 2006	ES&S AutoMark	Cascade County, Montana. Programming problems occurred with the new AutoMark system. ⁴
			Clerk and Recorder Peggy Carrico said most of the systems worked, although the AutoMark in Belt was shut down because of a programming problem.
5	May 2006	ES&S Optical scanner	Harrison County, Indiana. Flawed ballot programming errors by ES&S were detected in the testing on ES&S optical scanners. ⁵ Time didn't allow the revised programming to be tested.
			Programming errors in automatic tabulation equipment connected to voting machines were discovered by county officials before and during the primary.
			After the problems were discovered during a routine test before the election, county officials returned some of the equipment to the Omaha company for reprogramming, but there wasn't time before the primary to perform a second test, said AJ Feeney-Ruiz, a spokesman for Secretary of State Todd Rokita.
6	May 2006	ES&S Optical Scanners	Taylor County, Upshur County, and Mineral County, West Virginia. ES&S provided flawed programming for the optical scanners. ⁶
			None of Taylor County's votes could be counted last night because the main computer would not read tabulators from individual voting machines.
			Upshur County's counter was in such bad shape that as of midnight the county was trying to get a similar machine from a neighboring county.
			Mineral County's optical scan ballot counter was producing skewed results .

³ Voters to decide candidates in runoff. The Daily Citizen. June 12, 2006. By Jeff Hunter. http://www.thedailycitizen.com/articles/2006/06/13/news/top_stories/top01.txt

⁴ **Glitch, absentee votes slow results.** Great Falls Tribune. June 8, 2006. By SONJA LEE, Tribune Staff Writer.

http://www.greatfallstribune.com/apps/pbcs.dll/article?AID=/20060608/NEWS01/606080310/1002

⁵ Ballot-counting problem. WHAS11.com. May 15, 2006. http://www.whas11.com/topstories/stories/WHAS11_TOP_ballotcounting.42e3d88f.html

⁶ Several Counties Have Vote Counting Problems. New voting systems were used for the first time. WOWKTV 13. May 10, 2006. by Dave Kirby. http://wowktv.com/story.cfm?func=viewstory&storyid=10787

Map #	Date	Machine	Place/Description
7	May 2006	006 ES&S Optical	Kanawha County, West Virginia. Ballot programming flaws were provided by ES&S.7
		Scanners	Kanawha County officials tried to test the county's new optical scan voting machines on Tuesday, but were unable to complete the dry run because the machines were not fully programmed.
8	May 2006	ES&S iVotronic	West Virginia. ES&S ballot programming errors were discovered before the elections on iVotronics touch screens in 13 out of 34 counties using the machines. ⁸
			Ireland said the number of counties reporting problems with ES&S-prepared ballot software has increased to 13 of the 34 counties that have contracts with the company to provide electronic voting systems.
			A glitch in some of the systems allows users of the company's Ivotronic [sic] machines to cast ballots and have their votes recorded correctly, but does not count the votes properly.
9	May 2006	Aay 2006 ES&S iVotronic	Wichita Falls, Texas. ES&S provided flawed programming for the touch screens.9
			And according to City Clerk Lydia Ozuna the blame rests firmly on the shoulders of Election Systems and Software, the county's election vendor.
			Besides a delay in ballot counting, Ozuna said she had received calls about difficulties with the electronic voting machines. Poll workers called in saying the machines were not working properly.
			Ozuna said she had hired a person from ES&S to solve issues with the machines. Programming was the main reason for the problems, she said.
10	May 2006	ES&S Optical scanner	Pulaski County and Phillips County, Arkansas. ES&S provided flawed ballot programming in both counties. ¹⁰
			Daniels said that in Pulaski and Phillips counties, the problems involved old optical scanners that were not programmed adequately to count paper ballots in the election. Initial count showed a tie for House District 41, with both candidates getting 613 votes.
			The recount showed 655 to 664.

⁷ Kanawha's dry run of voting machines remains incomplete. Charleston Gazette. May 03, 2006. Archived at http://www.votersunite.org/article.asp?id=6596

⁸ **Election test delayed.** TMCnet. May 1, 2006. by Charleston Gazette staff writer Phil Kabler and The Associated Press. http://www.tmcnet.com/usubmit/2006/05/01/1628275.htm

⁹ Vendor bender. City clerk blames ES&S for Election Day difficulties. Times Record News. May 14, 2006. By Robert Morgan. http://www.votersunite.org/article.asp?id=6598

Map #	Date	Machine	Place/Description
11	May 2006	ES&S iVotronic	Arkansas. Ballot programming errors were found on iVotronics touch screens in eight counties before the election. ¹¹
			Pulaski County Elections Director Susan Inman said that county decided not to use the machines after reviewing the programming code from voting machine vendor Election Systems & Software and discovering errors.
			"In its entirety, it was wrong," Inman said. "I forwarded to them in time for the deadline I was given the information for the runoff."
			72 of 75 counties are have ES&S equipment. 64 still used iVotronics in the election.
12	May 2006	Hart Intercivic eSlate	 Tarrant County, Texas. Ballot programming error on the eSlate omits contests from the ballot.¹² Two City Council races were dropped from the Tarrant County ballot in areas of the city served by non-Arlington schools because of a voting machine programming oversight, county election officials said Monday.
13	May 2006	Diebold AccuVote OS	 Barry County, Michigan. Diebold delivers flawed ballot programming, which tallied votes incorrectly. ¹³ Hastings Clerk Thomas Emery saw the problem immediately after receiving the roll from the precinct where he had voted. "The person I voted for had zero votes, and I know how to fill in an oval," he said. Emery voted for the candidate on the top line of the ballot. The fourth line of the ballot reserved for write-in candidates accumulated 90 votes from only 127 ballots cast at the precinct.
			"I knew for certain there wouldn't be 90 write-ins," Emery said.

¹⁰ Recount Planned In Close Race For State House Nomination. Todaysthv.com. June 2, 2006. http://www.todaysthv.com/news/news.aspx?storyid=29413

¹¹ Election Problems Persist For Eight Counties. Today's THV. June 8, 2006. http://www.todaysthv.com/news/news.aspx?storyid=29699

Eight counties won't use electronic equipment in runoff. The Log Cabin Democrat. June 9, 2006. by Andrew DeMillo, Associated Press Writer. http://ap.thecabin.net/pstories/state/ar/20060609/4000271.shtml

¹² Ballot problems mark 1st day of early voting. Star-Telegram. May 2, 2006. By Neil Strassman. http://www.dfw.com/mld/dfw/news/local/14479735.htm

¹³ **Malfunction delays Hasting results.** The Grand Rapids Press. May 04, 2006. By Ben Cunningham. http://www.mlive.com/news/grpress/index.ssf?/base/news-0/1146754492135040.xml&coll=6

Vote-Switching Software Provided by Ve	endors – A Partial List Reported in the News
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Map #	Date	Machine	Place/Description
14	June 2006	Diebold AccuVote TS	Leflore, Jackson Counties, Mississippi. Ballot programming by Diebold was incorrect on touch screens in these two counties. ¹⁴
			In Leflore and Jackson counties, early voters had to cast paper ballots because the touch-screen machines were not customized for each precinct, said David Blount, spokesman for Secretary of State Eric Clark.
			The machines were fixed by Tuesday afternoon, he said.
			The problems prompted the Leflore County election commissioners to petition the Board of Supervisors for their own technician. ¹⁵
			Diebold Election Systems, as part of its contract, will offer assistance to the county for five years.
			But the county's difficulties during the June 6 primary were due to improper programming by a Diebold technician. These problems prompted the commission's request.
15	March 2006	ES&S Optical AIS 315	Webb County, Texas ES&S blamed by county for errors in programming and inadequately training county staff. ¹⁶
			Due to a programming error, the PEBs could not be used and tabulators had to read each individual flash card, significantly delaying the vote tally.
			The company prepared all software for the election. Additional problems cited include delays of three days before receiving coding for electronic ballots, following mistakes involving receipt of nearby McMullen County codes.
			The County is considering a suit against ES&S. ¹⁷
			Webb County Commissioners Court may take its first step toward suing Election Systems and Software, Inc. today. The county paid nearly \$900,000 for the electronic voting machines that officials alleged had programming errors and inadequately trained staff.

¹⁴ **Most voting goes smoothly. A few glitches in primary, not serious.** Sun Herald. June 7, 2006. By Shelia Byrd, AP. http://www.sunherald.com/mld/sunherald/news/state/14758095.htm

¹⁵ Voting Machines. The Greenwood Commonwealth. June 28, 2006. By Susan Montgomery. http://www.zwire.com/site/news.cfm?newsid=16858105&BRD=1838&PAG=461&dept_id=104621&rfi=6

¹⁶ Election Uproar; County officials say there were plenty of red flags Laredo Morning Times, March 14, 2006 by Julie Daffern. http://www.zwire.com/site/index.cfm?newsid=16299334&BRD=2290&PAG=461&dept_id=473478&rfi=8

¹⁷ **Suit eyed in vote machine controversy.** Laredo Morning Times, June 12, 2006. By Kirsten Crow. http://www.lmtonline.com/site/news.cfm?newsid=16776354&BRD=2290&PAG=461&dept_id=569392&rfi=6

Map #	Date	Machine	Place/Description
16	November 2004	ES&S Optical scan	Taylor County, Wisconsin (Medford). Four and a half months after the election, a consulting firm discovered that ES&S had programmed the optical scanners incorrectly, failing to account for partisan elections. All straight-party votes were lost, affecting approximately 27% of the ballots. ¹⁸
			That failure meant that the votes of everyone who voted straight ticket - anyone who voted only for candidates of a single party - were not counted. In all, about 600 of 2,256 ballots cast were not counted, [Taylor County Clerk Bruce] Strama said.
			Medford and Taylor County officials have been told by Nebraska-based Election Systems & Software that the city will be reimbursed for the costs of setting up the vote-counting machine in the fall because the program was faulty. A spokeswoman said the company takes full responsibility for the error.
			"There's really nothing voters can do at this point," said Kevin Kennedy, the executive secretary of the State Elections Board.
17	November 2004	ES&S Optical scan	Carroll County, Arkansas. A mis-programmed chip from ES&S skewed the results from the JP District 2 race. ¹⁹
			The glitch was discovered by Carroll County Election Commission members when they met to certify election results Monday at the Berryville courthouse.
			It is believed that the programming alignment was out of kilter, as provided by Election Systems and Software, the company that programs computer chips to read the local ballots.
			As a result, ballots for the JP District 2 race will either be hand counted, or re-run through the optical scanner machine once the correct computer chip is provided.

¹⁸ About 600 Medford ballots cast in November ignored. Marshfield News-Herald. March 12, 2004. By Jake Rigdon. http://www.wisinfo.com/newsherald/mnhlocal/285285292773470.shtml

¹⁹ Computer glitch blamed for miscount in JP voting. Carroll County Star Tribune. November 10, 1004. By Anna Mathews. Reproduced at http://www.votersunite.org/article.asp?id=3889

Map #	Date	Machine	Place/Description
18	AugustES&S Unity2004ElectionManagement	Natrona County, Wyoming. The Unity Election Management System, used to tally votes from both optical scan machines and paperless electronic voting machines, failed to tally votes correctly. ²⁰	
		System	Noticing that the totals for the city of Evansville seemed low, Natrona County Clerk Mary Ann Collins checked the printouts from the precinct voting machines in Evansville and found that the totals didn't match the totals computed by the Unity software, which combines all the totals countywide.
			The error changes the order in which some candidates finished, but does not affect which candidates will advance to the general election. Only one candidate lost votes but five of the 10 municipal races in the county had changed totals.
			Collins determined the software problem only affected nonpartisan races after checking the voting machine printouts and the absentee votes against the Unity software report in several partisan races. There does not appear to be any pattern in the skewed vote totals.
19	May 2004	ES&S Optical scanner	Craighead County, Arkansas. The chip programmed by ES&S for the county's optical scanner gave one candidate all the votes for constable. A manual recount revealed the error.
		(possibly Model 150)	A recount was made in the District 13 constable race because returns from Precinct 20 showed one candidate received all 158 votes cast in the precinct, and the opposing candidate doubted that.
			The incident was traced back to a computer chip coding error, and the result of the recount was that both candidates had received votes in the precinct. ²¹
20	March 2004	ES&S Optical Scan	Lubbock County, Texas. ²² The machines failed to count the votes for the Precinct 8 Democratic chairman race. Dorothy Kennedy, Lubbock County elections administrator said they would need to recount all the ballots for all races in the county.
			She said Omaha, Nebbased ES&S, which prepared the vote tabulators, will foot the bill for the recount.

²⁰ Clerk changes election vote totals. August 21, 2004. By Matthew Van Dusen, Star-Tribune staff writer.

http://www.casperstartribune.net/articles/2004/08/21/news/casper/6c2e825b3f9e154187256ef70007adbb.txt

²¹ Commission OKs results of elections. Jonesboro Sun, May 28, 2004. By LeAnn Askins. http://www.jonesborosun.com/archivedstory.asp?ID=9486

²² Software blamed in Precinct 8 Democratic chair race mixup. Lubbock online.com; March 11, 2004; By Brian Williams, Avalanche-Journal http://www.lubbockonline.com/stories/031104/loc_031104030.shtml

Map #	Date	Machine	Place/Description
21	April 2003 ES&S Model	Lake County, Illinois. ²³ Machines provided incorrect outcomes for 4 races in Lake County.	
		100 optical scan	The problem was caused by a programming error that failed to account for "no candidate" listings in some races on the ballot, Clerk Willard Helander said Thursday. As a result, election results were placed next to the names of the wrong candidates in four different races, including in Waukegan's 9th Ward.
			Incorrect results also were tabulated in races for the Libertyville Community High School District 128 Board, the North Chicago Community Unit District 187 Board and the Foss Park District Board in North Chicago.
			The clerk's office corrected the problem shortly after 10 p.m. on election night. But by then, many people who had kept track of the results on the clerk's online Web site believed the unofficial results were complete.
			Helander blamed the problem on Election Systems & Software, the Omaha company in charge of operating the county's optical-scan voting machines. She said a company official told her the programmers were unaware the county would have "no candidate" listings on its ballot.
22	November 2002	ES&S Optech 3P Eagle	Baldwin County, Alabama. Tabulation machine initially handed the gubernatorial election to the wrong candidate.
			Initial, unofficial results from Baldwin County showed that Democrat Don Siegelman garnered about 19,070 votes in the county, enough to give him a razor-thin victory over Republican challenger Bob Riley. The next morning, however, officials said those totals were inaccurate and certified returns giving Siegelman about 6,300 fewer votes enough to swing the election to Riley.
			Officials have traced the problem to a data pack from the Magnolia Springs voting location. They said the vote-counting machine there printed out accurate results when the polls closed at 7 p.m. But they said the cartridge, which resembles an eight-track cassette, gave bogus figures when it was plugged into the computer in Bay Minette. ²⁴

²³ Returns are in: Software goofed – Lake County tally misled 15 hopefuls. Chicago Tribune; April 4, 2003; By Susan Kuczka, Tribune staff reporter reproduced at http://www.vote.caltech.edu/mail-archives/votingtech/Apr-2003/0096.html

²⁴ Voting snafu answers elusive. The Mobile Register; 28 Jan 2003; by Brendan Kirby, staff writer. Referenced at http://www.votewatch.us/Members/ Unregistered%20User/electionexperience.2004-08-12.9166974619. Confirmed by VotersUnite! with Sharon Jerkins in the Baldwin County Elections office, who provided the model number of the optical scan machines.

Map #	Date	Machine	Place/Description
23	November 2002	ES&S Optical scan	Sarpy County, Nebraska. The optical scan machines failed to tally "yes" votes on the Gretna school-bond issue, giving the false impression that the measure failed miserably. The measure actually passed by a 2-1 margin. Responsibility for the errors was attributed to ES&S, which provided the ballots and the machines. ²⁵
24	November 2002	Optech Eagle	Wayne County, North Carolina. A programming error caused the Optech Eagle optical scan machines to skip several thousand party-line votes, both Republican and Democrat. Correcting the error turned up 5,500 more votes and reversed the outcome for the House District 11 state representative race. ²⁶
25	November 2002	ES&S Optech 4C	South Dakota. When the optical scanner double counted votes, the error was blamed on a "flawed chip." ES&S sent a replacement chip, and voters demanded that the original chip be impounded and examined. Only ES&S was allowed to examine the chip. ²⁷
26	November 2002	ES&S Optech 3P	Chatham County, North Carolina. A ballot programming error caused Republican votes to go to the Libertarian candidate. ²⁸
			every time voters marked a straight Republican ticket, Frederick C. Blackburn, the N.C. House 54 Libertarian candidate, got a vote because of a voting machine programming error.
27	August 2002	ES&S Central count optical scan	Clay County, Kansas. The machine showed that the challenger (Jennings) had won, but a hand recount showed that the incumbent commissioner (Mayo) won by a landslide – 540 votes to 175.
			In one ward, which Mayo carried 242-78, the computer had mistakenly reversed the totals. ²⁹
			This statement indicates that the computer in the "one ward" had the candidates mis-mapped to the table that holds the voting results.

²⁵ Omaha World-Herald, 6 November 2002; "A late night in Sarpy; glitches delay results". Referenced in *Black Box Voting*, by Bev Harris. Chapter 2.

²⁶ "Winners' may be losers." The News and Observer; November 12, 2002; By Wade Rawlins and Rob Christensen.

²⁷ NPR: Morning Edition, 6 November 2002; "Analysis: Senate races in Minnesota and South Dakota" Referenced in *Black Box Voting* by Bev Harris, Chapter 2.

²⁸ Mechanic to smooth vote. New Observer. October 15, 2004. By Jessica Rocha, Staff Writer. http://newsobserver.com/news/story/1730333p-7996316c.html

²⁹ Aug. 6 ballot problems alleged: Clay, Barton county candidates seek review of races. Lawrence Journal-World. August 22, 2002. The Associated Press. http://www.ljworld.com/section/election02/story/103526

Map #	Date	Machine	Place/Description
28	April 2002	iVotronic and optical scanners	Miami-Dade County, Florida. In Medley, the software used to combine 45 absentee votes with the 309 electronic ballots changed the order of the candidates' names as it computed the results. The initial tally showed wins for two City Council candidates who actually lost the election. David Leahy, Miami-Dade elections supervisor said that all software had been tested before the election without a problem. Election workers who had been watching the results fed into the computer noticed the problem. The tabulation computer didn't give any warning.
			An ES&S technician had opened the ballot program on the memory cards to change a header. At the same time, he bumped the first candidate to the last position.
			When the technician saved the edit, a prompt most likely popped up on the monitor asking him if he was sure he wanted to change the order of the names. The technician ignored the prompt and confirmed the change.
			"It was something that should have been picked up and caught and was missed and was not flagged because the normal follow-up procedures to making a change in the database were not followed," [Mike] Limas [ESS Chief Operating Officer] said.
			Leahy said he is concerned because the computer did not raise any red flags, and humans had to spot the error. "If something is amiss you should get some type of error message, but there wasn't one," he said.
			In the future, Leahy said county election workers, not technicians from the equipment company, will program all the touch-screen and absentee ballot machines before an election to try to limit the possibility of error.
			He also suggested that humans might add up the absentee ballots with the touch-screen voting results to double check the computer's tally. $^{\rm 30}$

³⁰ **Technician's Error, Not Machines, To Blame In Dade Election Mix-Up.** The Miami Herald. April 4, 2002. By Oscar Corral. [Purchase through Miami Herald online archives: http://www.miami.com/mld/miamiherald/archives/]

More Reports of Vote-Switching Software – Not Included on the Mar

Date	Machine	Place/Description	
June 2006	ES&S Optical Scan (M-100)	Pottawattamie County, Iowa. Flawed ballot programming by ES&S reported results of all nine contested primary races incorrectly. ³¹	
		Pottawattamie County elections deputy Gary Herman said anomalies were noticed almost immediately. Electronic results were posted, but with a disclaimer that ballots would be hand-counted the next day.	
		The results were dramatic. Every winner in Pottawattamie County's nine contested races turned out, in retrospect, to be a loser. Initial returns that showed incumbent Recorder John Sciortino losing by a margin of 1,245 votes to 1,167 was found to have actually won the election 2,061 votes to 347.	
June 2006	ES&S Optical scan	St. Francis County, Arkansas. A recount of the State Senate District 16 runoff primary race reversed the initial, incorrect results caused by a ballot programming error. ³²	
		Results in the Senate District 16 originally showed Representative Arnell Willis of Helena-West Helena defeating Earle School Superintendent Jack Crumbly by 28 votes. However, a recount in St. Francis County on Monday gave Crumbly 100 more votes, making him the winner.	
		Election officials had said earlier that a tabulation error had resulted in 100 fewer votes being counted for Crumbly. St. Francis County Election Commission Chairman Frederick Freeman apologized to the candidates.	
May 2006	ES&S Optical scan	Phillips County, Arkansas. Tabulators, with flawed ballot programming furnished by ES&S, mistook 432 Democratic votes for Republican and fail to count them in the Democratic primary. ³³	
		Several days after the Election Commission certified that race and Crumbly and Willis began campaigning for the June 13 runoff, commission staff discovered that 432 votes cast at Allen Temple in Phillips County had mistakenly been counted as Republican ballots, effectively nullifying them.	
		The malfunctioning ballot tabulating machine was programmed by Election Systems & Software, the Omaha, Nebbased company that in November signed a \$ 15 million contract to provide election equipment to Arkansas counties.	
		Ballot programming problems in Phillips County also affected the House District 41 contest. ³⁴	

³¹ **Polk County recorder to contest election.** The Des Moines Register, June 24, 2006. Bert Dalmer, Register Staff Writer. http://desmoinesregister.com/apps/pbcs.dll/article?AID=/20060624/NEWS05/606240322/1001. Archive: http://www.votersunite.org/article.asp?id=6607

³² **Recount In AR Race Reverses Result.** Eyewitness News. June 20, 2006. http://www.myeyewitnessnews.com/news/local/story.aspx?content_id=3734B371-B2D5-416C-9A72-D1AF88685953. Archive: http://www.votersunite.org/article.asp?id=6606

³³ **District 16 recount sought; 432 lost votes cited in suit.** Northwest Arkansas News Source, June 24, 2006. BY DANIEL NASAW. http://www.nwanews.com/adg/News/158589/. Archive: http://www.votersunite.org/article.asp?id=6605

More Reports of	Vote-Switching Software	- Not Included on	the Map Handout
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Date	Machine	Place/Description
November 2005	ES&S optical scanner	Cumberland County, Pennsylvania. Flawed ballot programming of straight-ticket votes hands the race to the wrong candidate for magisterial district judge. Straight-ticket Democrat votes were given to the Republican candidate. Straight-ticket Republican votes were not counted at all. ³⁵
		A 9.5-hour hand recount produced a new winner Thursday in the election for magisterial district judge for the Carlisle area.
		Democrat Jessica Rhoades came out on top by a slim two-vote margin — 1,703-1,701 — over Republican Kathy Keating in the recount.
Initial vote totals re		Initial vote totals recorded Tuesday night showed Keating won by a 1,650-1,468 margin.
		However, a programming error by the county's ES&S voting machines awarded all votes by Democrats casting a straight-ticket ballot to Keating. The problem involved a software coding error in which Keating's political affiliation was mislabeled as Democrat.
		Straight-ticket Republican votes were not awarded to either candidate. So the hand recount subtracted straight-ticket Democrat votes from Keating's total and added straight-ticket Republican votes. Meanwhile, Rhoades gained straight-ticket Democrat votes.

³⁴ Vendor bender. City clerk blames ES&S for Election Day difficulties. Times Record News. May 14, 2006. By Robert Morgan. http://www.votersunite.org/article.asp?id=6598

³⁵ **DJ race still up in the air.** Sentinel, November 11, 2005. By John Hilton. http://www.cumberlink.com/articles/2005/11/11/news/news02.txt Archive: http://www.votersunite.org/article.asp?id=6323

More Reports of	Vote-Switching Software	- Not Included on	the Map Handout
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Date	Machine	Place/Description
November 2004	Optical Scan	Lancaster County, Nebraska. As the optical scanners read the election-day ballots, occasionally, they added votes. While County Election Commissioner David Shively explained that the software was reading ballots twice, ES&S referred to the misread as a mechanical problem. ³⁶
		Inexplicably, both Shively and the Nebraska deputy secretary of state for elections, Neal Erickson, agreed that "the malfunctions were not the type that taint vote counts."
		The problem, described by Shively: While machines correctly fed themselves just one ballot at a time, their software at times incorrectly detected two ballots. The machines in all cases stopped short of actually counting two ballots, Shively said, and instead responded by shutting down.
		Shively said it became clear after 2 p.m. Tuesday that problems existed. At that time, officials began testing the six machines — four for election-day ballots, two on loan from Election Systems & Software to count absentee ballots — and found that two were not correctly matching results.
		That came as a surprise, Shively said, because all were tested late last week and performed well.
		After consulting with ES&S, Shively decided to use the two absentee-ballot machines to speed up the election-day counting. But the problem was apparently contagious.
		From about 10:30 p.m. to 12:30 a.m., the machines were purring along glitch-free, Shively said. "I thought, 'Boy, we're back in business,'" Shively said.
		Then the two-ballot problem described by Shively began, plaguing almost all the machines, drastically slowing the count.

³⁶ Problem machines spur call for recount. Lincoln Journal Star. November 14, 2004. By Nate Jenkins. http://www.journalstar.com/articles/2004/11/14/election/doc4189b9c7f14bf764391458.txt

More Reports of Vote-Switching Software – Not Included on the Map Ha	andout
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Date	Machine	Place/Description
November 2004	Optical Scan	Sarpy County. Election officials ended up with around 10,000 phantom votes (more votes than voters). They still don't know what went wrong. ³⁷
		Johnny Boykin lost his bid to be on the Papillion City Council. The difference between victory and defeat in the race was 127 votes. Boykin says, "When I went in to work the next day and saw that 3,342 people had shown up to vote in our war, I thought something's not right."
		He's right. There are not even 3,000 people registered to vote in his ward.
		For some reason, some votes were counted twice.
		Deputy Sarpy County Election Commissioner Ed Gilbert says, "It affected 32 of the 80 precincts. And I suppose as many as 10,000 votes."
		No one is sure exactly what went wrong.
		Astonishingly, election officials are projecting a winning candidate based on the assumption that the votes were counted twice and that the outcome wouldn't be affected.
		Election officials say they don't believe the glitch will impact who won and who lost any of the races. They figure that when votes were doubled in a particular race, the totals were doubled for both candidates. Vote totals would be skewed but percentages would not change.
		In spite of that, the candidates want to know the real numbers.
		VotersUnite contacted the Sarpy County Elections office and was told that ES&S had analyzed the problem and determined it to be "mechanical and procedural." That was all the election staff knew.

³⁷ Countinghouse Blues: Too many votes. WOWT Omaha. November 5, 2004. http://www.wowt.com/news/headlines/1161971.html

More Reports of	Vote-Switching Software	- Not Included on	the Map Handout
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Date	Machine	Place/Description
August 2004	Sequoia Veri- Vote	Sacramento, California. In a demonstration of its Direct Recording Electronic voting machine with a paper trail, Sequoia demonstrated that its machine failed to report four votes in Spanish. ³⁸
		Last week, Sequoia vice president and former California assistant secretary of state Alfie Charles was showing off the new Veri- Vote printer that his firm is supplying to Nevada when an astute legislative aide in Johnson's office noticed two votes were missing.
		Charles tried again to vote in Spanish with the same result: He cast votes on two mock ballot initiatives, but they were absent from the electronic summary screen and the paper trail.
		"The paper trail itself seemed to work fine but what it revealed was when he demonstrated voting in Spanish, the machine itself did not record his vote," Chesin said. "Programming errors can occur and the paper trail was the way we caught it."
May 2004	Optical scanner (possibly Model 150)	Fulton County, Arkansas. The chip programmed by ES&S for the county's optical scanner didn't work. ES&S claimed that the printer didn't send them all 16 ballots needed for the programming. The printer said he did send the entire set of ballots, and his records showed that the weight of the package mailed to ES&S was the weight of 16 ballots. ³⁹
		Riverside Graphics printer Michael Eaton insisted his company sent ESS [sic] a full set of ballots. "We printed the ballots for Independence County where there are three times as many people and we didn't have any problems. We've had this problem with ESS before," said Eaton.
		He said Riverside Graphics checked its postage records, and the weight of the package sent to ESS was consistent with a package containing 16 ballots.
May 2004	Model 150	Sevier County, Arkansas. The chip programmed by ES&S counted all ballots as blank. The test ballots were printed correctly, and the pre-election testing was successful. But then the ballots for election day were printed in a completely different print run, and the codes on these election-day ballots didn't match the codes on the computer chip prepared by ES&S. ⁴⁰
		After consulting with officials from Election Systems & Software, it was determined that the codes on the computer chip and the codes on the ballot didn't match.

³⁸ Lawmakers cut e-voting's paper trail: Manufacturers demonstrating new printers in Nevada were embarrassed when machine failed to recognize votes. Tri-Valley Herald. August 13, 2004. By Ian Hoffman, Staff Writer. Reproduced at: http://www.votersunite.org/article.asp?id=2512

Wrong Time for an E-Vote Glitch. Wired News. August 12, 2004. By Kim Zetter.

http://www.wired.com/news/evote/0,2645,64569,00.html?tw=wn_tophead_2

³⁹ No explanation for ballot machine malfunction. South Missourian; May 27, 2004; by George Jared, Staff Writer

⁴⁰ Ballots counted by hand in primary elections. The DeQueen Bee; May 24, 2004. http://www.dequeen.com/news/comments.php?id=1188_0_1_0_C

Date	Machine	Place/Description
March 2004	rch 2004 Unity Election Management	Bexar County, Texas. Misprogramming causes the Unity software to balk at accumulating votes from the optical scan machines used to count absentee ballots. ⁴¹
	Software	Tabulation of the Bexar County votes was delayed for about $1 1/2$ hours, beginning about 8 p.m.
		"They have big problems," said Nick Peña, a poll watcher for District 28 U.S. Rep. Ciro Rodriguez, D-San Antonio. "They look very worried.
		"They have a bunch of technicians in the tabulation room, and they are pulling out wires and reattaching them, and the computer screens are all frozen. You can tell that something is happening," Peña said.
		Borofsky said the delay occurred after it was discovered the tabulation computers hadn't been properly programmed with updated data in order to count the mail-in paper ballots.
		The computer system then was taken off line and updated with the information needed to process the 3,000 paper ballots, which were tabulated using high-speed scanners.
March 2004	2004 Diebold AccuVote	San Diego, California. Optical scan machines counted 208,446 ballots. The machines miscounted 2,821 votes in the Democratic presidential race and the Republican U.S. Senate seat. ⁴²
	optical scan	Most of the absentee miscounts occurred in the Democratic presidential race, in which 2,747 votes cast for John Kerry were incorrectly credited to Rep. Dick Gephardt. In the Senate race, in which Bill Jones won, 68 votes cast for Barry L. Hatch were credited to candidate Tim Stoen, and six votes cast for James Stewart were credited to Stoen. ⁴³
November 2002	ES&S optical scan	Scurry County, Texas. A landslide victory for two commissioner candidates caused poll workers to question the results. The chip in the ES&S 650 contained an incorrect ballot program. ES&S sent a new chip, and the county officials also counted the votes by hand. The opposing candidates actually won by large margins. ⁴⁴

More Reports of Vote-Switching Software - Not Included on the Map Handout

⁴¹ **Bexar computer glitch delays counting of votes.** San Antonio Express News. March 10, 2004. Tom Bower. http://www.mysanantonio.com/news/metro/stories/MYSA10.12A.VotingProblems0310.4ea013d9.html

⁴² New electronic scanners miscounted some county votes. NC Times April 7, 2004; By: Gig Conaughton - Staff Writer; http://www.nctimes.com/articles/2004/08/news/top_stories/22_27_394_7_04.txt

⁴³ **Some votes miscounted in primary, officials say**. Union-Tribune. April 8, 2004. By Luis Monteagudo Jr. and Helen Gao, staff writers. http://www.signonsandiego.com/news/politics/20040408-9999-1m8vote.html

⁴⁴ 06/03/04. Conversation with Scurry County Elections Director, who told VotersUnite it was an ES&S 650. She said it was the chip with the ballot programming on it, that they had to get a new one from ES&S. Original reference was from *Black Box Voting*, Chapter 2. Houston Chronicle, 8 November 2002; "Ballot glitches reverse two election results"

More Reports of V	Vote-Switching Software – Not In	cluded on the Map Handout
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Date	Machine	Place/Description
November 2002	Sequoia optical scan	Taos, New Mexico. A software programming error caused the Sequoia Optech optical scanner to assign votes to the wrong candidates. Just 25 votes separated the candidates in one race; another race had a 79-vote margin.
		After noticing that the computer was counting votes under the wrong names, Taos County Clerk Jeannette Rael contacted the programmer of the optical machine and was told it was a programming error. ⁴⁵
November 2002	Optical scan	Adams County, Nebraska. During the general election, Adams County was the last in Nebraska to have election results, due to both machine and software malfunctions. ES&S talked about some compensation for the election problems including paying for election worker overtime and not charging for programming adjustments. ⁴⁶
September	Optical scan	Union County, Florida. 47
2002		In Union County, Florida, a programming error caused machines to read 2,642 Democratic and Republican votes as entirely Republican in the September 2002 election. The vendor, ES&S, accepted responsibility for the programming error and paid for a hand recount.
September 2002	Optical scan	Robeson County, North Carolina. Ballot tabulating machines failed to work properly in 31 of 41 precincts. Local election officials said the problem was the result of a software glitch, and ballots had to be recounted. There had been a problem in the programming of the memory cards. ⁴⁸

⁴⁵ 06/03/04. Conversation with a woman at the Elections Division of New Mexico. She told me Taos used the Sequoia Optech and confirmed that it was a programming error by the local programmer. New Mexico does not have their ballot programming done by the vendor. Original reference from *Black Box Voting*, Chapter 2. Albuquerque Journal, 7 November 2002; "**Taos To Recount Absentee Ballots**"

⁴⁶ YorkNewsTimes.com, December 20, 2002; "Omaha election systems firm to pay for county election problems." Referenced in *Black Box Voting*, by Bev Harris. Chapter 2.

⁴⁷ Black Box Voting by Bev Harris, Chapter 2.

⁴⁸ January 2004 Conversation with Dinah in the Robeson County Clerk's office. Original reference was "Voter turnout surprises officials." Sun News. September 12, 2002. http://www.myrtlebeachonline.com/mld/sunnews/news/local/4056664.htm

More Reports of Vote-Switching Software - Not Included on the Map Handout

Date	Machine	Place/Description
April 2002	Optical Scan and iVotronic	Dallas County, Texas. A ballot programming error tallies 18 results incorrectly. Here is one case when flawed ballot data on a paperless electronic voting machine caused a serious election miscount. It was detected only because voters also used optical scan paper ballots in the election. ⁴⁹
		Mrs. Hawkins-Curtis, a candidate for Rowlett mayor was added to the ballot four days before the start of early voting. The change in the ballot definition wasn't programmed into all 390 ES&S iVotronic machines until after early voting began. The ballot data was changed only in Rowlett polling places.
		When the results were combined with the results from ES&S optical scan machines, the error caused the tally software to improperly tally results in the mayor's race as well as 17 other races, including propositions and school board races. Nearly 5,000 of the 18,000 ballots were improperly counted.
		An initial count didn't reveal a problem, and the results of all races were posted as final but "unofficial" on the Election Department's Web site at 10:17 p.m. Saturday.
		A few minutes later, a second count - called the reconciliation process - began to show that the number of voters who signed in at numerous precincts didn't match the vote totals, Ms. Pippins-Poole [county's assistant elections administrator] said.
		The extent of the miscount wasn't discovered until Monday when Election Systems & Software began a thorough investigation, Ms. Pippins-Poole said.
		The touch-screen ballots have been used in early voting in 91 elections since 1998 without any problems, Ms. Pippins-Poole said.

⁴⁹ Glitch affects 18 races: Problems in counting early votes could alter some election outcomes. Dallas Morning News. May 8, 2002. Ed Housewright, staff writer.

Date	Machine	Place/Description
March 2002	AVC Edge	Palm Beach County, Florida. Former Boca Raton Emil Danciu was ahead by 17 points in a poll conducted by the opposition. Exit polling indicated an overwhelming win for Danciu, but he received only 19% of the votes, even losing in his home precinct. Voters report that their votes appeared to be registered for his opponent.
		"What really alarmed us was the next day when we started getting phone calls from voters who had gone into the voting places people we didn't even know and pushed Emil Danciu's name only to end up with a check mark by Susan Haynie's name. They repeatedly tried to vote for him, but another name, particularly Haynie's, came up. They couldn't get their vote registered. They were telling wild stories about poll workers unplugging and kicking the machines. They didn't know whether their votes ever counted. Some were told to vote again." ⁵⁰
		In addition, the results were delayed because, according to the election supervisor's office, 15 cartridges had been lost, and the system won't give a final tally until it has read all the cartridges. The office said that a poll worker had taken them home, and then they found them.
		With no paper ballots to check the accuracy of the machine, Danciu sued for the right to look at Sequoia source code. The county attorney argued that it would be a felony to disclose the source because it is a trade secret. The judge denied Danciu's request for the software code. ⁵¹
November 2000	Diebold AccuVote OS	Bernalillo County, New Mexico. Flawed ballot programming for the presidential election caused 67,000 absentee and early-voting ballots to be counted incorrectly.
		The panicked officials first thought computerized tabulation machines or balloting software were at fault. The county uses the AccuVote optical scan system from Global Election Systems Inc. of McKinney, Texas.
		The tabulation system and software worked correctly, but a county technical employee failed to set up an element of the system properly, said Frank Kaplan, Global's Western regional manager. New Mexico's ballots are designed for voting by party, but voters can choose candidates from other parties. A programmer did not link the candidates' names to their respective parties. ⁵²

More Reports of Vote-Switching Software - Not Included on the Map Handout

⁵⁰ **Out of Touch: You press the screen. The machine tells you that your vote has been counted. But how can you be sure?** New Times; April 24, 2003; By Wyatt Olson. http://www.newtimesbpb.com/issues/2003-04-24/feature.html/1/index.html

⁵¹ Electronic voting's hidden perils. Mercury News. February 1, 2004. By Elise Ackerman. http://www.mercurynews.com/mld/mercurynews/news/special_packages/election2004/7849090.htm

⁵² **Human error is cause of N.M. election glitch.** Government Computer News; November 20, 2000; Vol. 19 No. 33 http://www.gcn.com/vol19_no33/news/3307-1.html

More Reports of Vote-Switching Software - Not Included on the Map Handout

Date	Machine	Place/Description
November 1998	Votronic and Model 100	Dallas, TexasA software programming error caused Dallas County, Texas's new, \$3.8 million high-tech ballot system to miss 41,015 votes during the November 1998 election. The system refused to count votes from 98 precincts, telling itself they had already been counted. Operators and election officials didn't realize they had a problem until after they'd released "final" totals that omitted nearly one in eight votes.The system vendor, ES&S, assured voters that votes were never lost, just uncounted. The company took responsibility and was trying to find two apparently unrelated software bugs, one that mistakenly indicated precinct votes were in when they weren't, and another that forgot to include

⁵³ Black Box Voting by Bev Harris, Chapter 2.

⁵⁴ Who Counts The Votes? By Gary Ashwill and Chris Kromm. http://www.southernstudies.org/reports/votingmachines-new.htm