ELECTION REFORM POLICY ANALYSIS:
"Voter-Verified Paper Trails" Are Not Needed To Keep Elections From Being Stolen

As outdated & infamous punch-card and lever style voting systems are steadily being phased out throughout the country, *direct recording electronic* ("DRE") or "ATM-style" voting machines are becoming more popular. Some people, however, have attacked these newer machines, claiming that they are dangerously prone to manipulation, and that hardware or software failures are especially susceptible to resulting in lost votes. Some have even gone as far as to suggest that new machines are being used as part of a conspiracy to rig elections around the country.

Many of these critics believe that their concerns would be best addressed if DREs produced a printed ballot, which, in theory, voters would examine to determine that their votes had been cast and counted properly. To this end, Rep. Rush Holt (D-NJ) has introduced the "Voter Confidence and Increased Accessibility Act" (H.R. 2239), which would go beyond current law – which was recently changed by the "Help America Vote Act" (HAVA) to require all voting machines to produce a printed audit trail – to add a new requirement that a "hard copy" of each ballot be verified by the voter before it is cast.

The integrity and reliability of the voting process is of the utmost importance, and the creation of electronic records that can be used for audits and recounts is essential. Technology that allows voters to check their ballots before casting them, as is required by HAVA, is also very important. However, many of the concerns that have been raised over the reliability and security of DREs are overstated or unwarranted. Furthermore, while calls for the production of a *voter-verified individual-ballot paper trail* by DREs may be well-intended, such a step would lead to a wide range of negative consequences.

Fact: DRE Systems Are Replacing Outdated, Failed Technologies
Current DRE systems are very popular replacements for outdated technologies like levers and punch cards. Those older systems often have high rates of error, are harder to use, are often inaccessible to people with disabilities, and are harder to adapt for people who speak different languages. Empirical evidence from use in the field suggest that touch screens are easier to use, including by the elderly & minorities, are more accurate, more accessible to voters with disabilities, and easier to adapt to different languages than older technologies.[1] DREs also *already* allow voters to verify their ballots before they are cast, by displaying a final ballot on screen to be confirmed. In many ways, DREs are a significant advance from a voter's perspective.

Fact: Security and Reliability Concerns With DRE Machines Have Been Exaggerated
DREs are highly sophisticated, with most of them storing ballot records in multiple formats and in multiple locations. Furthermore, DREs are already required under federal law to create records that can be audited, and most machines currently provide not only the total vote tallies but also a record of how each individual ballot was cast. In many cases, like the machines used in Georgia, DREs produce 3 records of the vote: the official count, a backup count on a separate chip, and a paper record printed out once polls close. In order to rig a DRE, an individual would need to be intimately familiar with its

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[1] *See, e.g.* Michael Tomz & Robert T. Van Houweling, *"How Does Voting Equipment Affect the Racial Gap in Voided Ballots?,"* http://www.stanford.edu/~tomz/pubs/gap.pdf

software, gain access to it long enough to change its code, conceal the changes during pre- and post-election testing, and do this on enough machines to actually alter the outcome of an election. While such rigging is possible *in theory*, in practice it is highly improbable – in fact, in practice, it would be far easier to simply "lose" paper ballots.[2]

Fact: Mandating Voter-Verified Paper Trails Could Deny Voters With Disabilities the Right to Cast a Secret Ballot

For the first time, the Help America Vote Act recognized that voters with disabilities should have the same opportunities to cast a secret ballot as everyone else. One key reason for the growth in use of DREs is that they can give everyone a truly private vote; particularly the visually impaired, those with motor skill impairments, or other people with disabilities. For blind or visually impaired voters, including many elderly voters, the creation of a paper trail obviously offers no benefit (causing them, instead, even greater concerns over privacy). Proponents of voter-verified paper trails attempt to respond to the concerns of blind voters by suggesting that they be allowed to verify their ballots, in lieu of paper, by having the DRE read or display their choices back to them prior to final casting of the ballot.[3] Yet this "solution" for the blind is exactly the kind of verification that the law *already requires*, for *every* voter. Apparently such proponents believe that the current technology for ballot verification is fundamentally flawed, yet is somehow still good enough for people with disabilities.

Fact: Voter-Verified Paper Trails In DREs Are An Untested And Unproven Technology

Right now, there are no DRE machines that produce a voter verified paper trail in wide use anywhere in the world. In a recent October 2002 trial of this new technology in Sacramento, CA, for example, printers jammed, and the ballots had to be handled with "many creative tools that were on hand . . . such as a windshield wiper or a back scratcher." Such breakdowns require entire machines be taken out for service, taxing poll workers and creating long lines at the polls. Vendors are working to create new DREs that produce voter verified paper ballots that meet secrecy and security concerns, but these new machines have mostly not been certified by testing agencies and have not been tested in the field.

Fact: Voter-Verified Paper Trails Are of Questionable Value from a Security Standpoint

A piece of paper that shows the voter what they are voting for does not necessarily ensure a secure vote, because assuming a DRE can be rigged, what a paper receipt shows and what the machine counts could *still* be two different things. A better way to ensure accuracy, in addition to rigorous pre- and post-election testing, is to randomly take machines offline during election day and vote on them numerous times to ensure that votes are being counted correctly, a procedure known as parallel testing.

Fact: Voter-Verified Paper Trails Would Create New, Unintended Security Concerns

Producing a paper record creates privacy concerns, as strong security measures would need to be taken to ensure that voters could not take the paper receipts with them upon leaving the polls – opening the door to the sale or even coercion of votes – or that poll workers or elections officials could not violate the sanctity of secret ballots. Keeping a voter's vote secret is critical to a free and fair democracy.

The Leadership Conference on Civil Rights is deeply concerned about the sanctity and security of elections, as the right to vote – and have that vote counted – stands out as perhaps the most important civil right of all. Bearing this in mind, documented improvements in election systems should not be delayed based on unwarranted fears, untested theories, and technology that simply does not exist.

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[2] To date, there has been no proven instance of attempted fraud in the use of DRE voting equipment. *See* Secretary of State's Ad Hoc Touch Screen Task Force, *Report to the Secretary of State*, CA Secretary of State Kevin Shelley, July 1, 2003, at 18.

[3] Avante International Technology, Inc., *"Response to the 'limitations' of printers (the real story),"* May 6, 2003, http://www.aitechnology.com/votetrakker2/News%20Releases/Response%20to%20Doug%20Lewis%20re%20printers.pdf at 6.