## OPENING REMARKS BY ARDEN L. BEMENT, Jr.

Director, National Institute of Standards and Technology First Symposium on Building Trust and Confidence in Voting Systems Wednesday, Dec. 10, 2003

Thank you and good morning. I am very pleased to have the opportunity to address this extremely timely and important symposium.

Major changes are taking place in our voting systems.

Our trusty old ballot boxes often are being replaced by a host of new technologies. Citizens are now much more likely to encounter optical scanners or touch screen systems at the polling place than a wooden box with a sturdy lock.

As a result of these changes, Congress enacted the Help America Vote Act -- commonly known as HAVA -- in October of 2002.

The act gives NIST a key role in helping to examine and improve voting systems by 2006.

To coordinate our work, NIST has established a Voting Systems Office within our Information Technology Laboratory, which has a great deal of expertise in areas such as computer security and usability.

For some time now we have been meeting with members of the elections community -- ranging from individual citizens to local election officials and voting machine vendors – to learn more about their concerns.

I want to stress that NIST is a non-regulatory agency, and we recognize that our role is limited. It is essential that we be in close contact with a variety of interested parties. This symposium is being held in that spirit.

I also want to say up front that there is much work to be done and that much of this job will be tackled by others. Our share of that workload will be determined in part by the Help America Vote Act's requirements, what the community thinks we can and should do, and by the resources available to us. To date, we have been doing the preparatory work, if you will.

Meanwhile, we are preparing a report to Congress on the usability and accessibility of voting systems.

Our computer scientists are reviewing voting machine standards in light of a growing body of research on how to make these systems easily accessible to everyone, including the blind and other voters with disabilities.

We also are examining assistive technologies for individuals with disabilities and varying levels of literacy.

Additionally, voting machines can and should be designed in a way that allows poll workers to set up the machines properly and easily.

When voting is complete, poll workers should be able to get an accurate final tally in a timely manner.

NIST has considerable experience working with independent testing authorities and private-sector laboratories that handle security evaluations of complex computer systems. In coordination with the Election Assistance Commission, we expect to apply our experience in this area to voting systems.

Under HAVA, NIST will propose a process to accredit independent testing laboratories as part of the transition from the current accreditation process developed and conducted by the National Association of State Election Directors for the Federal Election Commission.

While many of these efforts are already under way, we have longer term goals as well – again, depending in part on resources.

The Election Assistance Commission, or EAC, is called for by the Help America Vote Act to oversee voting standards efforts. We are pleased to welcome to the symposium two of the nominees to the EAC-- Paul DiGregorio and Gracia Hillman. They will be making some brief remarks tomorrow morning. We're glad they're here, and we look forward to working with them in future voting standards endeavors.

I have the privilege of chairing the Technical Guidelines Development Committee, called for by the Help America Vote Act.

This committee is charged with making recommendations to the EAC with regard to voluntary standards and guidelines related to voting machines.

In collaboration with many of the election community groups here today, NIST is to provide world-class standards research and recommendations to this technical guidelines effort at the request of the Election Assistance Commission.

NIST also will serve as the executive secretariat to the Technical Guidelines Development Committee.

The committee will provide technical guidance on implementing election-related technologies that have an impact on issues such as security and usability.

NIST could focus on a number of different areas under HAVA.

Near the top of the list would be examining the security of computers, computer networks, and computer data storage used in voting systems.

Also important is encouraging the development of methods to prevent fraud and methods to detect fraud should it take place.

And, NIST could examine ways to ensure the protection of voter privacy.

We are by no means newcomers to this area. Let me take a few moments to describe some of NIST's previous efforts in the voting technology arena.

During the 1970s, several states and localities ran into voting equipment problems, and guidelines for testing or evaluating voting machines were the exception rather than the rule.

In 1975 NIST prepared a report titled *Effective Use of Computing Technology in Vote Tallying*.

The report concluded that a critical lack of technical skills at the state and local level was hampering efforts to implement needed testing and standards.

This report, and the efforts of many state and local election officials, led Congress to designate the Federal Elections Commission to do a study of the feasibility of developing national standards for election systems.

The FEC released the study in 1982.

Congress responded by appropriating funds for the FEC to develop national standards for computerized voting systems.

NIST also published a study in 1988 titled *Accuracy, Integrity and Security in Computerized Vote-Tallying*.

This report made suggestions about improving voting systems in ways that would help to build greater public confidence in election results and led to the adoption of voting standards by the FEC.

The long-standing efforts by the FEC and the National Association of State Election Directors to create and implement the current voting system standards provide a foundation on which the next generation of standards can be built.

We realize how important it is for voters to have trust and confidence in voting systems even as new technologies are introduced. Increasingly, computer technology touches all aspects of the voting process – voter registration, vote recording, and vote tallying.

Consequently, issues about computer technology used in the voting process have expanded from the single question of accuracy for tallying votes to the larger issue of information technology security: specifically, integrity, availability, and confidentiality of information within voting systems. Panelists today and tomorrow will discuss these critical issues.

Ultimately, our collaborative efforts should lead to improved experiences for individual voters as well as election officials.

In addition to the considerable technical expertise NIST brings to the table, we also have a great deal of experience in developing standards, which is a critical part of the challenge before us.

To accomplish our mission, NIST works at home and internationally with standards development organizations, a number of which will be represented on the Technical Guidelines Development Committee.

Our goal is to enable U.S. industry to produce products and services that are high quality, reliable, interoperable, and secure.

We aim to facilitate the benefits of standardization while preserving plenty of room for innovation and change.

Quite often standards development begins as a highly contentious process because people represent a variety of interests.

I urge you to share your vision of changes that would benefit the American voter. We also welcome your views as to how NIST could best support efforts to improve voting systems.

Despite the complexity of the issues that we face, I am very optimistic about the outcome because we have seen standards development efforts succeed even in the face of serious obstacles.

I am delighted that so many of you have volunteered your time and expertise at this symposium, and I thank you for being here.

I challenge you to give this your very best effort.