Four years after the muddled 2000 election, the nation's voting systems are undergoing an expensive overhaul. But there is no guarantee that pregnant chads and other problems have been eliminated.

Though 42 states plan to use new voting machines in at least some areas, many voters will be pulling levers or punching paper ballots just as they did four years ago. The federal government tried to spur changes with the 2002 Help America Vote Act, or HAVA. But delays in distributing its $3.9 billion in funds, among other problems, have election watchers worried.

Major steps have been taken, notably in Florida, Maryland and Georgia, which have rid themselves entirely of punch cards since 2000. Touch-screen machines will be up and running in jurisdictions in at least 34 states by November.

But new voting systems, while fixing old problems, bring the risk of new types of glitches. With polls forecasting a tight race between President Bush and likely Democratic nominee John Kerry, both parties are bracing for fresh battles over ballot counting this November. "Everybody fights the last war, so people will be more on edge," says a senior Bush adviser.

warns Doug Chapin, director of the nonpartisan election-reform group Electionline.org, "It's not the potential for problems but the potential for scrutiny that's going to be the big difference. It's like forest fires -- the woods aren't necessarily drier, but more people have matches."

HAVA includes two steps intended to limit problems. For the 2004 election, states must provide provisional ballots for voters who believe they are registered but aren't on the rolls. They also must set up hotlines and Web sites to let voters check whether their ballots have been counted.
In the 2000 election, thousands of Florida voters were disenfranchised after a private company confused a list of convicted felons -- who are barred from voting -- with registered voters with the same name.

Additionally, poll workers in every state now will be required to demand identification from first-time voters who registered by mail but didn't provide identification with their registration form. That rule stemmed from a congressional compromise between Republicans, who have traditionally favored requiring state-issued identification, and Democrats, who argue that verification requirements disproportionately disenfranchise the poor, elderly, minorities and immigrants, who are less likely to have the necessary identification.

Though some states are bitterly divided on voter identification and other changes, election experts say neither party should gain an advantage. "It's a wash," says Mr. Chapin. "[HAVA] is intended to be neutral, and I see no evidence that either side thinks it will favor them."

If anything, more protections for voters, such as provisional ballots and new technology, could encourage higher voter turnout, something both parties are pushing for nationwide.

In the long term, the new law requires each state to create its own uniform voter-registration database. Compliance with the costly rule, which requires municipalities with disparate or nonexistent registration rosters to integrate them into a statewide database, will take time. So far only nine states -- including 2004 swing states Minnesota and West Virginia -- have nearly or fully met the database requirement. The rest have until January 2006, a deadline postponed from Jan. 1, 2004.

So far, Washington has been slow to release the money states need to replace or update voting machines and registration databases. Though HAVA was signed into law in 2002, the Election Assistance Commission set up to distribute the funds wasn't confirmed until December 2003, nearly 10 months behind schedule. While it scrambled to set up shop, an initial $650 million in funds was released by the U.S. General Services Administration. Half of that money was used to help states replace or upgrade
antiquated punch-card and lever machines. The other half was appropriated to states based on their populations.

A spokesman said the commission could start distributing more funds as early as mid-May. But Kimball Brace, president of Election Data Services, a political-consulting firm based in Washington, says that is too late. "What that means for counties and states is that they're still behind the eight ball," he says. "If counties were going to make changes for November, they should have had those plans well, well under way."

For many states -- starting with Florida, the epicenter of balloting problems in 2000 -- the primary goal has been overhauling outmoded voting technology. Florida initially tackled the balloting-overhaul project on its own, spending $24 million in state money to help counties buy optical-scan and touch-screen systems. It recouped about $11.7 million of that money in federal payouts.

But questions about the security of electronic machines have caused some states to slam the brakes on updating their technologies. In the 2002 primary race for Florida governor, electronic voting machines were shut down improperly, leaving some votes uncounted on election night. During the Florida presidential primary in March, some electronic ballots were improperly coded, forcing election workers to recount ballots by hand.
Another bone of contention is whether touch-screen machines can be hacked. Last year, a study conducted by researchers at Johns Hopkins and Rice universities said touch screens made by Diebold Election Systems, a subsidiary of Diebold Inc., were vulnerable to hackers. In Ohio, where Diebold has its headquarters, lawmakers halted a voting-machine overhaul project, saying they need time to study security issues. Diebold has signed contracts to provide new systems to 43 Ohio counties.

Diebold, whose touch screens are found in nearly 40 states, rejects the claim. At a recent committee hearing on ballot security, Diebold's marketing director, Mark Radke, told lawmakers that his company's track record should speak for itself. "The numbers from the March Super Tuesday election tell a compelling story -- zero security-related problems at the more than 55,000 Diebold touch-screen voting stations deployed across the country," Mr. Radke said.

To safeguard against human and technical error, some lawmakers are pushing paper trails as backups for electronic machines.

Last year, Rep. Rush Holt (D., N.J.) introduced the Voter Confidence and Increased Accessibility Act, a bill that would amend HAVA by requiring voting systems produce a paper record that could be verified by voters. In March, Sens. Hillary Rodham Clinton (D., N.Y.) and Bob Graham (D., Fla.) filed their own $150 million bill.

"If we have huge problems again, people will fundamentally lose confidence in our democracy and in their vote...This legislation is good insurance against that risk," Sen. Clinton said in a statement.

Some states aren't waiting for the federal government to act. Nevada's secretary of state, Dean Heller, made his state the first to install printers at all electronic touch-screen machines by November. California plans to do the same by July 2006.