

330 Jefferson Dr.  
Pittsburgh, PA 15228

June 6, 2006

Members, County Council  
436 Grant St.  
Pittsburgh, PA 15219

Dear Council Members

My name is David Eckhardt. I reside at 330 Jefferson Drive in Mt. Lebanon. I have taught Computer Science at Carnegie Mellon for three years, after having received my Ph.D. there. My areas of specialty are computer operating systems and computer networks. In addition, I have served as a Judge of Elections in Mt. Lebanon since 1997. I appreciate the opportunity to address Council today to provide some from-the-trenches reporting on the May 16th primary election.

The good news is that we experienced nearly the best-case outcome. The bad news is the nature of that best case. On April 21st I was interviewed by KQV Radio and asked to predict how the primary would go. I responded, "I think the best case is that if we're lucky we'll have a smooth election where nothing dramatically goes wrong but where the voters have no real assurance that their votes were counted." We didn't have a Ohio-2004 meltdown or a Chicago-2006 meltdown. Apparently we had the typical roughly-10% failure rate of electronic voting machines—which is to say, typical but unacceptable. There were other irregularities, such as thousands of absentee ballots being misplaced and counted late. But hidden behind these "growing pain" issues was exactly what I predicted: now that the dust has settled, voters have no real assurance that their votes were counted.

There has been some press coverage of the widespread unavailability of zero prints at polling places. For example, a May 18th Post-Gazette article attributes the zero-print problems to inadequate training of poll workers. But the VotePA report I am providing you with makes clear that serious design flaws and bugs exist in the zero-print portion of the iVotronic software. Even though this software has been examined at the federal level, certified in multiple states, and used in multiple elections, it still cannot reliably perform one of the simpler tasks it faces. Problems with simple, exposed parts of the system raise concerns about the hidden, intricate parts.

Overall, we were asked to trust these machines because they would be running software which had been carefully examined for security problems, inaccuracies, and operational problems. We now know what we previously suspected: this approach is no substitute for enabling voters to personally verify that their votes are properly recorded.

Please investigate the best way for the County to achieve genuine voter-verifiability, set a date, and start us moving toward justifiable trust in our voting systems.

Sincerely,

Dr. David A. Eckhardt