

VOTING MACHINE COST ANALYSIS

“Cost comparisons of DRE and Optical Scan Voting”

Centre County Voting Machine Forum

State College, PA

May 7, 2008

(Testimony of Elizabeth Goreham)

Thank you for holding two public hearings for the public to express their opinion on the county's Voting Machines.

As a voter and as a political candidate, I believe nothing is more important than confidence in election results.

I strongly encourage the County Commissioners to purchase new, Optical Scan equipment before the Presidential Election in November, for two reasons.

First, Optical scan voting provides a voter verified paper trail for recounting close or questionable election results, an option we don't currently have with DRE voting.

Second, cost comparison studies of DRE vs Optical Scan voting equipment finds optical scan voting costs to be significantly less than that of DRE touch screen equipment. And when applied to Centre County, the estimated operating cost savings over a 10 year period would exceed the full estimated \$900,000 cost of replacing touch screen machines with new optical scan machines.

An internet search of “Cost Comparison of DRE and Optical Scan voting” listed several thousand sites. Tonight I want to bring two representative studies to your attention.

The first is from North Carolina, where the actual annual expenditures of four counties – two using optical scanning equipment, two using DRE touch screen i.e. direct reporting machines revealed that the operating cost of optical scan equipment was about 30%-40% lower. These costs include maintaining, repairing, storage, transporting, programming, and testing machines, as well as providing training and technical support for election workers on a system that requires increasingly complex and time consuming security procedures to compensate for its numerous inherent vulnerabilities.

For the 6-year period of 1999 – 2004, all four counties reported full costs of running elections for each of the 6 years; the study normalized the six year averaged data to calculate the cost per voter. These are real numbers, not projections.

The average annual cost per voter for the DRE machine used in Mecklenburg County was \$5.06; in Guilford County the average cost for DRE machines was \$4.96. At the same time, the averaged annual cost per voter for the Optical scan machine in Durham County was \$3.61; in Wake County the average annual cost for optical scan machines was \$3.56. The savings difference then is approximately \$1.40 - \$1.45 per voter. This means not only are touch screens more expensive to acquire, they are also more expensive to operate year after year.

Applying this to our county with somewhat more than 90,000 registered voters, Centre County’s average savings per year

would be more than \$125,000/year. If the number is adjusted by 10% to account for increased costs since the study was completed five years ago, the average savings per year increases to \$137,500.

The estimate cost of replacing the DRE touch screens with Optical Scan machines is \$900,000. Cost and operational savings would more than pay for new optical scan equipment.

A more recent report, "Cost Analysis of Maryland's Electronic Voting System," makes the same per voter cost calculation in Maryland. Table 2 on Page 13 in this report lists 19 counties that unfortunately switched from optical scan machines to touch screen systems. After the change, each of these 19 counties experienced increased costs - an average increase in annual per voter cost of 179% from \$1.02 to \$2.84, a difference \$1.82 per voter. Applying this savings to Centre County by switching from touch screens to optical scan machines for our 90,000 registered voters would reduce county costs by \$163,800 annually.

The comparison of Optical Scan vs DRE operational costs in these two reports is compelling.

What has been the average per voter cost of conducting elections since the purchase of DRE voting machines? Very likely the numbers will be in line with costs experienced in Maryland and North Carolina.

If so, the County could easily afford to do the right thing: give Centre County voters what they want, a paper audit trail, purchase Optical Scan machines and pay for them out of the annual operational savings. I love happy endings, don't you?