

AUDITING THE MID-TERM ELECTION  
January 2, 2007

In the 2006 general election, according to unofficial results posted on the website of Ohio Secretary of State J. Kenneth Blackwell, there were 4,177,498 ballots cast in the State of Ohio. Of these, only 3,831,716, or 91.72%, contained a vote for Governor, and only 3,826,829, or 91.61%, contained a vote for United States Senate. These numbers created the appearance of undervote (or overvote) rates of 8.28% and 8.39%, respectively, in the two most hotly contested statewide races on the ballot. When the unofficial election results are examined county by county, there was a strikingly abnormal distribution of undervotes. I chose the United States Senate race to examine in detail because there were only two candidates on the ballot (and one write-in candidate), which makes the mathematical analysis simpler than for the Governor's race, in which there were four candidates on the ballot (and two write-in candidates).

The methodology was simple. The percentage of undervotes for each county was derived by fifth grade mathematics. The total number of votes counted for the candidates combined was subtracted from the number of ballots cast. The remainder is the number of uncounted ballots, or undervotes. This number was divided by the number of ballots cast to determine the percentage of ballots left uncounted in each county.

There are 88 counties in Ohio. Of these 88 counties, according to unofficial results posted by J. Kenneth Blackwell, 71 counties had rates of undervotes ranging from 0.88% (in Greene County) to 6.90% (in Holmes County). In 62 of these 71 counties, the percentages were tightly clustered between 2.00% and 4.50%. The rate in these 71 counties combined was 2.99%.

In 16 of the other 17 counties, including 4 of the 10 most populous counties in the State of Ohio, the percentages of undervotes were clearly anomalous, ranging from 11.91% (in Montgomery County) to 26.48% (in Cuyahoga County), with a combined rate of 19.46%, or six and one-half times the rate in the rest of the state. Just four counties -- Cuyahoga, Lucas, Montgomery and Stark -- accounted for 219,332 undervotes, or 62.55% of the statewide total of 350,669. Cuyahoga County alone accounted for 148,928 undervotes, or 42.47% of the statewide total. It was difficult to believe that more than one in four voters in Cuyahoga County could not decide between Sherrod Brown and Mike DeWine.

UNOFFICIAL RESULTS: UNITED STATES SENATE

	Ballots Cast	Votes Counted	Undervotes/ Overvotes
16 counties	1,382,455	1,113,568	268,987 19.46%
71 counties	2,775,090	2,692,133	82,957 2.99%

In Marion County, Blackwell reported 19,853 total votes cast, and 21,128 votes counted for the United States Senate candidates -- an overcount of 1,275 votes. These are known as "phantom votes," because they are apparitions, with no explainable origin. There can never be more votes counted for an office than the number of persons voting in the election.

County	Ballots Cast	Votes Counted	Undervotes/Overvotes		Voting Technology
Cuyahoga	562,498	413,570	148,928	26.48%	touch screen
Morrow	15,679	12,242	3,437	21.92%	touch screen
Belmont	29,045	23,192	5,853	20.15%	touch screen
Coshocton	16,138	13,107	3,031	18.78%	touch screen
Licking	70,705	57,704	13,001	18.39%	touch screen
Jackson	12,025	9,974	2,051	17.06%	touch screen
Lucas	164,003	139,003	25,000	15.24%	touch screen
Tuscarawas	36,124	30,750	5,374	14.88%	touch screen
Stark	139,646	119,011	20,635	14.78%	touch screen
Perry	12,775	10,894	1,881	14.72%	touch screen
Carroll	12,664	10,898	1,766	13.95%	touch screen
Highland	14,351	12,358	1,993	13.89%	touch screen
Wood	50,666	44,190	6,476	12.78%	touch screen
Adam	9,592	8,378	1,214	12.66%	touch screen
Hancock	28,692	25,114	3,578	12.47%	touch screen
Montgomery	207,952	183,183	24,769	11.91%	touch screen
Marion	19,853	21,128	- 1,275	- 6.42%	touch screen

Note that there is no county falling between Holmes County (6.90%) and Montgomery County (11.91%). The counties listed above are clearly anomalous. The unofficial results cannot be right. And, of course, the unofficial results in Marion County are impossible.

Note also that all 17 counties listed above utilized touch screen voting machines, known in the trade as Direct Recording Electronic (DRE). 31 of 88 Ohio counties utilized optical scanners, and none of them had this problem. Data on voting technology utilized in 2006 by each Ohio county is displayed on a map provided by [www.yourvotecountsohio.org](http://www.yourvotecountsohio.org). As it happens, the voting machine vendor in all 17 of these touch screen counties was Diebold Election Systems.

In the 2005 general election in Ohio, several counties reported incorrect figures for total ballots cast. The false numbers were derived by counting absentee ballots at least twice, as the Diebold tabulators are programmed to do. That was one possible explanation. A more disturbing possibility was that some 227,000 votes had been lost by touch screen voting machines in Ohio.

There were 1,402,408 ballots cast in these 17 counties. If the rate of undervotes (touch screen machines do not allow overvotes) had been about 3%, as was the case elsewhere in the state, there would have been about 42,000. Instead there were 267,712 (or 268,987 if one takes into account the 1,275 phantom votes in Marion County). Whether or not this "affected the outcome," a phrase generally intended to mean who won and who lost the election, is beside the point. If 227,000 votes were not counted, the outcome was affected.

I stated at that time that even if the official results were to reduce these discrepancies, the question would remain as to how the unofficial results could have been so erroneous in the first

place. Once the official results were posted on the website of J. Kenneth Blackwell, I was able to compare the official and unofficial results for the 17 suspect counties and analyze the changes.

COMPARISON OF UNOFFICIAL AND OFFICIAL RESULTS, UNITED STATES SENATE

County	-- Unofficial Results --				-- Official Results --			
	Ballots Cast	Votes Counted	Undervotes		Ballots Cast	Votes Counted	Undervotes	
Cuyahoga	562,498	413,570	148,928	26.48%	468,056	452,832	15,224	3.25%
Morrow	15,679	12,242	3,437	21.92%	12,952	12,481	471	3.64%
Belmont	29,045	23,192	5,853	20.15%	24,484	23,556	928	3.79%
Coshocton	16,138	13,107	3,031	18.78%	13,865	13,366	499	3.60%
Licking	70,705	57,704	13,001	18.39%	60,726	58,923	1,803	2.97%
Jackson	12,025	9,974	2,051	17.06%	10,669	10,288	381	3.57%
Lucas	164,003	139,003	25,000	15.24%	146,652	142,304	4,348	2.96%
Tuscarawas	36,124	30,750	5,374	14.88%	31,913	31,385	528	1.65%
Stark	139,646	119,011	20,635	14.78%	143,753	139,264	4,489	3.12%
Perry	12,775	10,894	1,881	14.72%	13,368	11,189	2,179	16.30%
Carroll	12,664	10,898	1,766	13.95%	11,566	11,053	513	4.44%
Highland	14,351	12,358	1,993	13.89%	15,064	12,981	2,083	13.83%
Wood	50,666	44,190	6,476	12.78%	47,089	45,515	1,574	3.34%
Adams	9,592	8,378	1,214	12.66%	9,972	8,570	1,402	14.06%
Hancock	28,692	25,114	3,578	12.47%	26,147	25,622	525	2.01%
Montgomery	207,952	183,183	24,769	11.91%	219,153	188,836	30,317	13.83%
Marion	19,853	21,128	- 1,275	- 6.42%	22,224	21,604	620	2.79%
Subtotal	1,402,408	1,134,696	267,712	19.09%	1,277,653	1,209,769	67,884	5.31%

As shown in the table above, in four counties (Adams, Highland, Montgomery and Perry) the egregious errors in the election results have not been corrected. There are still far more ballots cast than votes counted. In fact, the discrepancies are even greater than in the unofficial results. In Montgomery County alone, there were 30,317 voters, or 13.83%, who did not vote for United States Senator. Either that, or the official results are not true and correct - which is, of course, the case. And this is not the only problem with the official results.

In 11 of the counties where, according to unofficial results, ballots cast had far exceeded the number of votes counted, the reported number of ballots cast has been revised downward. In Marion County, which originally reported 1,275 more votes counted than ballots cast, which is impossible, it is now acknowledged that the number of ballots cast had been underreported in the unofficial results. But in Stark County, where 20,635 undervotes, or 14.78% of ballots cast, were originally reported, the Board of Elections now reports, in the official results, 4,107 more ballots cast than in the unofficial results:

DIFFERENCE BETWEEN UNOFFICIAL AND OFFICIAL RESULTS

Ballots    Votes                    Absentee/

County	Cast	Counted	Undervotes	Provisional
Cuyahoga	- 94,442	+ 39,262	-133,704	30,791
Morrow	- 2,727	+ 239	- 2,966	271
Belmont	- 4,561	+ 364	- 4,925	529
Coshocton	- 2,273	+ 259	- 2,532	157
Licking	- 9,979	+ 1,219	- 11,198	1,464
Jackson	- 1,356	+ 314	- 1,670	464
Lucas	- 17,351	+ 3,301	- 20,652	3,694
Tuscarawas	- 4,211	+ 635	- 4,846	497
Stark	+ 4,107	+ 20,253	- 16,146	4,488
Perry	+ 593	+ 295	+ 298	369
Carroll	- 1,098	+ 155	- 1,253	244
Highland	+ 713	+ 623	+ 90	646
Wood	- 3,577	+ 1,325	- 4,902	1,664
Adams	+ 380	+ 192	+ 188	265
Hancock	- 2,545	+ 508	- 3,053	851
Montgomery	+ 11,201	+ 5,653	+ 5,548	10,272
Marion	+ 2,371	+ 476	+ 1,895	698
Subtotal	-124,755	+ 75,073	-199,828	

In Stark County, according to Blackwell's website, there had been, at the time the unofficial results were reported, 4,488 absentee and provisional ballots yet to be examined – from which, no doubt, the 4,107 additional ballots were drawn. Thus there is no indication from the Board of Elections that the number of ballots cast was overreported in the unofficial results. Rather, the number of votes counted was underreported. These numbers deserve closer scrutiny:

COMPARISON OF RESULTS, STARK COUNTY

	Sherrod Brown	Mike DeWine	Richard Duncan
Unofficial	68,266	50,741	4
Official	79,900	59,353	11
Difference	11,634	8,612	7

If there were only 4,107 additional ballots in Stark County, how did Sherrod Brown gain 11,634 votes, and how did Mike DeWine gain 8,612 votes? Where did these votes come from? If there were only 4,488 unexamined absentee and provisional ballots, where did the 20,253 newly counted votes come from? These numbers are impossible.

In fact, there are three other counties (Coshocton, Cuyahoga and Tuscarawas) where the number of newly counted votes exceeds the number of absentee and provisional ballots that remained to be examined on Election Night. In Cuyahoga County, there were 39,262 newly counted votes, drawn from only 30,791 unexamined absentee and provisional ballots. These numbers also deserve closer scrutiny:

COMPARISON OF RESULTS, CUYAHOGA COUNTY

Sherrod Brown	Mike DeWine	Richard Duncan
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Unofficial	291,469	122,101	0
Official	319,568	133,235	29
Difference	28,099	11,134	29

If there were only 30,791 absentee and provisional ballots in Cuyahoga County that remained to be examined on Election Night, how did Sherrod Brown gain 28,099 votes and Mike DeWine gain 11,134 votes? These numbers are impossible.

Finally, the vote totals for Richard Duncan, a write-in candidate, cannot be right. By comparing the unofficial and official results, one sees that his vote totals actually decreased, sometimes substantially, in four counties (Coshocton, Highland, Lucas, and Marion). This is especially ridiculous in light of the fact that, in many counties, write-in votes are not counted on Election Night, and thus are not included in the unofficial results. For example, Richard Duncan received 29 write-in votes in Cuyahoga County, none of which appeared in the unofficial results.

COMPARISON OF RESULTS FOR RICHARD DUNCAN

County	Unofficial	Official	Difference
Coshocton	6	2	- 4
Highland	31	10	- 21
Lucas	129	15	- 114
Marion	19	0	- 19

How did Richard Duncan lose 4 of his 6 votes in Coshocton County, 10 of his 31 votes in Highland County, 114 of his 129 votes in Lucas County, and all of his 19 votes in Marion County? These numbers are impossible.

There were 17 Ohio counties for which the unofficial results could not have been correct. Of these, only 7 counties (Belmont, Carroll, Hancock, Jackson, Licking, Morrow and Wood) have posted official results that withstand scrutiny. But there are more.

Dale Tavis performed a similar analysis of the 2006 Senate race. Using official results only, he identified not four, but six counties with inexplicably high percentages of undervotes:

"Furthermore, there were six counties that were definite and extreme outliers (all Diebold) compared to the other counties. Those six counties (Mercer, Darke, Highland, Montgomery, Adams, Perry) had undervote rates ranging from 11.2% to 16.3%, with an average of 13.8%, while the other 82 Ohio counties had undervote rates ranging from 0.62% to 6.76%, with an average of 3.37%. The undervotes in the six outlier counties amounted to almost a quarter (24.9%) of the undervotes in the whole state, whereas the total votes in those six counties amounted to only 7.1% of the total votes in the state."

Two of these counties -- Darke and Mercer -- did not appear as outliers in the unofficial results. At that time, the undervote rates for these two counties were reported as 3.47% and 3.51%, respectively. The differences between the unofficial and official results are ridiculous:

COMPARISON OF RESULTS, DARKE COUNTY

	Ballots Cast	Votes Counted	Undervotes	
Unofficial	20,435	19,726	709	3.47%
Official	23,350	20,187	3,163	13.55%
Difference	2,915	461	2,454	84.19%

COMPARISON OF RESULTS, MERCER COUNTY

	Ballots Cast	Votes Counted	Undervotes	
Unofficial	15,510	14,966	544	3.51%
Official	17,483	15,532	1,951	11.16%
Difference	1,973	566	1,407	71.31%

There you have it. The percentage of provisional and late-arriving absentee ballots containing no vote for Senator was 84.19% in Darke County, and 71.31% in Mercer County. Either that, or the official results are not true and correct -- which is, of course, the case.

When the unofficial results were posted on Blackwell's website, it was reported that there were 300 unexamined absentee and provisional ballots in Darke County, and 534 in Mercer County. Somehow, another 461 votes were counted in Darke County, and another 566 in Mercer County. These numbers cannot be right. And there is surely no legitimate way to account for an additional 2,915 ballots cast in Darke County, and 1,973 in Mercer County. Again, the problem lies in the Diebold tabulators, which are programmed to produce two sets of numbers for ballots cast. Very likely, Darke and Mercer counties reported the lower number in their unofficial results, and the higher number in their official results.

The obviously incorrect results in the other 10 counties are mainly attributable to the same problem that appeared in the 2005 election, the programming of Diebold tabulators to report two sets of numbers for ballots cast. One, "times counted," may or may not be correct; the other, "cards cast," equals "times counted" plus the number of absentee ballots, which thus are counted twice, or even three times. The reason for this is that absentee ballots consist of two or more pages, each of which is tallied as a "card cast." Or maybe it's the other way around. It depends which county is being audited. In Summit County, the "times counted" number is the high one. In Cuyahoga County, the "cards cast" number is the high one.

These numbers for "cards cast" and "times counted" also wreak havoc on the turnout data. If enough people vote by absentee ballot, the official turnout can exceed 100% of registered voters. In Summit County, according to the official, certified results, voter turnout was 110.16% countywide, exceeding 100% in three of ten wards in Akron and in all thirty of the suburbs:

VOTER TURNOUT BY WARDS AND TOWNS, SUMMIT COUNTY

	Registered Voters	Times Counted	Percent Turnout		Registered Voters	Times Counted	Percent Turnout
Akron Ward 1	15110	15018	99.39	Tallmadge	12721	15939	125.30
Akron Ward 2	11018	8042	72.99	Twinsburg	12630	14425	114.21

Akron Ward 3	13165	9711	73.76	Boston Hts Vill	1038	1267	122.06
Akron Ward 4	14628	14601	99.82	Clinton Vill	826	1056	127.85
Akron Ward 5	12345	7395	59.90	Lakemore Vill	1802	1883	104.50
Akron Ward 6	13605	15550	114.30	Mogadore Vill	2127	2435	114.48
Akron Ward 7	13149	13300	101.15	Northfield Vill	2422	2572	106.19
Akron Ward 8	16787	21908	130.51	Peninsula Vill	454	591	130.18
Akron Ward 9	11279	10769	95.48	Reminderville Vill	1982	2112	106.56
Akron Ward 10	11824	9804	82.92	Richfield Vill	2650	3408	128.60
Akron Total	132910	126098	94.87	Silver Lake Vill	2049	2899	141.48
				Bath Twp	7598	10287	135.39
				Boston Twp	643	708	110.11
Barberton	16736	17241	103.02	Copley Twp	10864	12759	117.44
Cuyahoga Falls	35148	40170	114.29	Coventry Twp	7599	8667	114.05
Fairlawn	5621	6764	120.33	Northfield Ctr Twp	3944	5009	127.00
Green	17318	20496	118.35	Richfield Twp	1771	2396	135.29
Hudson	17918	22348	124.72	Sagamore Hills Twp	8236	10056	122.10
Macedonia	7771	9373	120.62	Springfield Twp	9770	11732	120.08
Munroe Falls	3949	5108	129.35	Twinsburg Twp	1941	1962	101.08
New Franklin	10399	12804	123.13	Suburbs Total	240537	285309	118.61
Norton	8309	10086	121.39				
Stow	24301	28756	118.33	Summit County	373447	411407	110.16

In Cuyahoga County, according to the official, certified results, voter was 100% or more in sixty precincts, one of them in Cleveland, fifty-nine of them in the suburbs:

PRECINCTS WITH 100% TURNOUT, CUYAHOGA COUNTY

	Registered Voters	Cards Cast	Percent Turnout		Registered Voters	Cards Cast	Percent Turnout
Beachwood 00-C	649	686	105.70	Highland Heights 01-A	946	1083	114.48
Beachwood 00-D	681	750	110.13	Highland Heights 01-B	912	1051	115.24
Beachwood 00-H	684	726	106.14	Highland Heights 02-A	862	871	101.04
Beachwood 00-J	967	986	101.96	Highland Heights 02-B	403	549	136.23
Brecksville 00-E	510	510	100.00	Highland Heights 03-A	869	990	113.92
Brecksville 00-G	827	843	101.93	Highland Heights 03-B	933	963	103.22
Brecksville 00-N	552	555	100.54	Independence 00-C	796	805	101.13
Broadview Heights 05-C	1035	1066	103.00	Independence 00-G	852	872	102.35
Broadview Heights 05-D	946	967	102.22	Independence 00-H	696	696	100.00
Cleveland 04-G	727	784	107.84	Lyndhurst 03-E	454	572	125.99
Cleveland Heights 02-B	618	643	104.05	Lyndhurst 04-C	619	704	113.73
Fairview Park 05-A	652	685	105.06	Lyndhurst 04-D	496	561	113.10

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MORE PRECINCTS WITH 100% TURNOUT, CUYAHOGA COUNTY

	Registered Voters	Cards Cast	Percent Turnout		Registered Voters	Cards Cast	Percent Turnout
Mayfield Heights 00-B	610	610	100.00	Rocky River 04-F	509	523	102.75
Mayfield Village 03-A	465	467	100.43	Seven Hills 01-B	821	825	100.49
Middleburg Heights 04-C	630	642	101.90	Seven Hills 01-C	747	766	102.54
North Olmsted 03-B	906	994	109.71	Seven Hills 03-B	831	875	105.29

North Royalton 06-E	976	1036	106.15	Seven Hills 03-C	915	988	107.98
Olmsted Township 00-A	980	994	101.43	Shaker Heights 00-B	518	531	102.51
Orange 00-B	698	702	100.57	Shaker Heights 00-E	640	653	102.03
Parma 03-H	46	46	100.00	Shaker Heights 00-W	792	804	101.52
Parma 05-A	625	641	102.56	Shaker Heights 00-AA	562	678	120.64
Parma 05-E	1031	1068	103.59	Shaker Heights 00-JJ	740	776	104.86
Parma 07-B	724	747	103.18	Strongsville 01-L	580	606	104.48
Pepper Pike 00-A	722	875	121.19	Strongsville 03-A	523	636	121.61
Pepper Pike 00-F	556	620	111.51	Strongsville 03-B	834	850	101.92
Pepper Pike 00-H	442	449	101.58	Valley View 00-B	445	468	105.17
Richmond Heights 04-C	522	544	104.21	Walton Hills 00-B	642	667	103.89
Rocky River 01-G	519	540	104.05	Walton Hills 00-C	634	641	101.10
Rocky River 02-A	588	628	106.80	Westlake 01-E	757	807	106.61
Rocky River 02-C	309	345	111.65	Westlake 05-C	720	739	102.64

This is not a case of “voter fraud,” of dishonest people voting early and often. This is a case of election fraud, of dishonest vendors deliberately programming tabulators to produce false data. The tabulators do not have to be “hacked” in order to make it possible to throw an election. The tabulators are programmed to make it possible to throw an election. If we do not know how many ballots were cast, then we do not know if all the votes were counted, or if too many votes were counted. And if we cannot trust the count for total votes, we cannot trust the count for the individual candidates.

There is no legitimate reason for any accounting system to keep two sets of books. It is an open invitation to error and fraud. The result is, at best, an erroneously high number of undervotes and, at worst, a window of opportunity for altering the vote count. Secretary of State J. Kenneth Blackwell had a choice of which, if either, of these numbers to post as the number of ballots cast. Ohio had the good sense to get rid of Blackwell. Now Ohio needs to get rid of Diebold. Diebold tabulators need to be decertified in Ohio and in every other state of the Union.