



## Post-Election Audit September 13, 2011 Primary Election

General Information	
Contest Audited	Broadview Heights Mayor
Number of Precincts within Contest	15
Number of Batches within Contest	30
Number of Candidates within Contest	4
Number of Ballots Cast within Contest	4,189
Number of Ballots Cast within Election	7,569
Confidence Level	90%
Minimum Draws Needed	14.27933978
Number of Actual Draws	18
Number of Batches Audited	15
Number of Unique Batches Audited	12
Number of Ballots Audited	2,527
Number of Tabulation Discrepancies	0
Error Rate	0.00%
Number of Precincts with Accurate Signature Tallies	ALL
Number of Precincts with Accurate Ballot Reconciliation	ALL
Total Cost of Post-Election Audit	\$582.30
Cost Per Ballot (Ballots Cast in Audited Contest Only)	\$0.14
Cost Per Ballot (Ballots Cast in Entire Election)	\$0.08

Selected Precinct		
Draws	Batch Number	Batch Name
1	1666	BROADVIEW HEIGHTS -01-C Absentee
2	4365	BROADVIEW HEIGHTS -02-C Absentee
3	5129	BROADVIEW HEIGHTS -02-D Absentee
4	9379	BROADVIEW HEIGHTS -04-D Absentee
5	9170	BROADVIEW HEIGHTS -04-C Absentee
6	4768	BROADVIEW HEIGHTS -02-C Absentee
7	8782	BROADVIEW HEIGHTS -04-C
8	4267	BROADVIEW HEIGHTS -02-C Absentee
9	7668	BROADVIEW HEIGHTS -04-A
10	6224	BROADVIEW HEIGHTS -03-C
11	521	BROADVIEW HEIGHTS -01-A Absentee
12	7932	BROADVIEW HEIGHTS -04-A Absentee
13	2591	BROADVIEW HEIGHTS -02-A Absentee
14	8318	BROADVIEW HEIGHTS -04-A Absentee
15	1222	BROADVIEW HEIGHTS -01-B Absentee
16	9035	BROADVIEW HEIGHTS -04-C Absentee
17	5336	BROADVIEW HEIGHTS -02-D Absentee
18	9913	BROADVIEW HEIGHTS -04-D Absentee

Selection - Precinct picked for audit	Precinct ( $p$ ) - Batched by Type	Sam Alai	Rachel Manias	1st loser Tish Luciano O'Dell	2nd winner Joe Price	Over Votes	Under Votes	Total	Error Bound ( $u_p$ ) - Max. possible relative overstatement	$u_p/U$ Selection Probability	Running (cumulative) sum	Batch Range	Times $p$ Drawn - With Replacement	Audit Sam Alai	Audit Rachel Manias	Audit 1st loser Tish Luciano O'Dell	Audit 2nd winner Joe Price	Relative Error ( $e_p$ ) - Error Rate as a proportion of the margin of victory	Taint ( $t_r$ ) - Error rate as a proportion of the max possible relative overstatement	KM Factor	Net KM Factor - KM Factor taking into account pct's audited multiple times	K-M P Value	Status - Continue or stop audit
1	BROADVIEW HEIGHTS -01-C Absentee	163	16	13	75	0	0	267	0.448840382	0.066842747	0.066842747	1620 - 2287	1	163	16	13	75	0	0	0.851076798	0.851076798	0.851076798	Continue
2	BROADVIEW HEIGHTS -02-C Absentee	167	14	24	105	0	1	311	0.53478854	0.079642422	0.146485169	4025 - 4821	3	167	14	24	105	0	0	0.851076798	0.616461918	0.524656435	Continue
3	BROADVIEW HEIGHTS -02-D Absentee	118	8	17	35	1	0	179	0.268758527	0.04002438	0.186509549	4960 - 5359	1	118	8	17	35	0	0	0.851076798	0.851076798	0.446522919	Continue
4	BROADVIEW HEIGHTS -04-D Absentee	209	12	11	45	0	0	277	0.424283765	0.063185697	0.249695246	9369 - 9999	1	209	12	11	45	0	0	0.851076798	0.851076798	0.380025296	Continue
5	BROADVIEW HEIGHTS -04-C Absentee	114	9	8	23	0	1	155	0.231923602	0.034538805	0.284234051	8853 - 9197	1	114	9	8	23	0	0	0.851076798	0.851076798	0.323430712	Continue
7	BROADVIEW HEIGHTS -04-C	33	9	3	21	0	0	66	0.114597544	0.017066233	0.301300284	8682 - 8852	1	33	9	3	21	0	0	0.851076798	0.851076798	0.275264375	Continue
9	BROADVIEW HEIGHTS -04-A	48	31	8	20	0	0	107	0.162346521	0.024177164	0.325477448	7481 - 7722	1	48	31	8	20	0	0	0.851076798	0.851076798	0.234271123	Continue
10	BROADVIEW HEIGHTS -03-C	55	8	6	26	0	0	95	0.156889495	0.023364486	0.348841934	6209 - 6442	1	55	8	6	26	0	0	0.851076798	0.851076798	0.199382717	Continue
11	BROADVIEW HEIGHTS -01-A Absentee	173	11	17	80	0	0	281	0.469304229	0.069890289	0.418732223	232 - 930	1	173	11	17	80	0	0	0.851076798	0.851076798	0.169690004	Continue
12	BROADVIEW HEIGHTS -04-A Absentee	205	32	11	96	0	0	344	0.58526603	0.087159691	0.505891914	7723 - 8594	2	205	32	11	96	0	0	0.851076798	0.724331716	0.122911852	Continue
13	BROADVIEW HEIGHTS -02-A Absentee	147	13	35	77	0	0	272	0.428376535	0.063795205	0.569687119	2560 - 3197	1	147	13	35	77	0	0	0.851076798	0.851076798	0.104607426	Continue
15	BROADVIEW HEIGHTS -01-B Absentee	130	9	7	26	1	0	173	0.261937244	0.039008533	0.608695652	1020 - 1409	1	130	9	7	26	0	0	0.851076798	0.851076798	0.089028953	Stop
	BROADVIEW HEIGHTS -01-A	62	10	4	21	0	0	97	0.155525239	0.023161317	0.631856969	1 - 231						0.02319236	0.149122807	1.000234587	1	0.089028953	Stop
	BROADVIEW HEIGHTS -01-B	31	7	0	3	0	0	41	0.060027285	0.008939456	0.640796424	931 - 1019						0.004092769	0.068181818	0.91335071	1	0.089028953	Stop
	BROADVIEW HEIGHTS -01-C	38	5	5	30	0	0	78	0.140518417	0.020926453	0.661722877	1410 - 1619						0.034106412	0.242718447	1.123857823	1	0.089028953	Stop
	BROADVIEW HEIGHTS -02-A	45	9	16	40	0	0	110	0.182810368	0.027224705	0.688947582	2288 - 2559						0.032742156	0.179104478	1.036766281	1	0.089028953	Stop
	BROADVIEW HEIGHTS -02-B	40	9	19	20	0	0	88	0.121418827	0.01808208	0.707029663	3198 - 3378						0.001364256	0.011235955	0.860748125	1	0.089028953	Stop
	BROADVIEW HEIGHTS -02-B Absentee	115	11	16	37	0	0	179	0.272851296	0.040633889	0.747663551	3379 - 3785						0.028649386	0.105	0.950923797	1	0.089028953	Stop
	BROADVIEW HEIGHTS -02-C	73	7	16	19	0	0	115	0.160982265	0.023973994	0.771637546	3786 - 4024						0.004092769	0.025423729	0.873278801	1	0.089028953	Stop
	BROADVIEW HEIGHTS -02-D	37	3	18	14	0	0	72	0.092769441	0.013815522	0.785453068	4822 - 4959						-0.005457026	-0.058823529	0.803794754	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-A	27	4	3	10	0	0	44	0.06957708	0.010361642	0.795814709	5360 - 5463						0.009549795	0.137254902	0.98647538	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-A Absentee	78	1	6	29	0	0	114	0.186903138	0.027834214	0.823648923	5464 - 5741						0.031377899	0.167883212	1.022785275	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-B	16	3	2	19	0	0	40	0.077762619	0.011580658	0.835229581	5742 - 5857						0.02319236	0.298245614	1.212784437	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-B Absentee	97	4	2	36	0	0	139	0.236016371	0.035148314	0.870377895	5858 - 6208						0.04638472	0.196531792	1.059253857	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-C Absentee	190	8	16	65	0	2	281	0.450204638	0.067045916	0.937423811	6443 - 7112						0.066848568	0.148484848	0.999485208	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-D	18	5	1	3	0	0	27	0.039563438	0.005891914	0.943315725	7113 - 7171						0.002728513	0.068965517	0.914119524	1	0.089028953	Stop
	BROADVIEW HEIGHTS -03-D Absentee	79	7	12	33	0	0	131	0.207366985	0.030881755	0.974197481	7172 - 7480						0.028649386	0.138157895	0.987508957	1	0.089028953	Stop
	BROADVIEW HEIGHTS -04-B	5	0	0	7	0	0	12	0.025920873	0.003860219	0.9780577	8595 - 8632						0.009549795	0.368421053	1.347538264	1	0.089028953	Stop
	BROADVIEW HEIGHTS -04-B Absentee	18	2	2	2	0	0	24	0.032742156	0.004876067	0.982933767	8633 - 8681						0	0	0.851076798	1	0.089028953	Stop
	BROADVIEW HEIGHTS -04-D	45	7	2	16	0	0	70	0.114597544	0.017066233	1	9198 - 9368						0.019099591	0.166666667	1.021292158	1	0.089028953	Stop
<b>Totals</b>		<b>2576</b>	<b>274</b>	<b>300</b>	<b>1033</b>	<b>2</b>	<b>4</b>	<b>4189</b>	<b>6.714870396</b>	<b>1</b>			<b>15</b>	<b>1562</b>	<b>172</b>	<b>160</b>	<b>629</b>	<b>0.360163711</b>	<b>2.412575203</b>	<b>28.17819631</b>	<b>27.85156161</b>	<b>5.32338976</b>	

Poll Book Justification						
Precinct	Ballots Cast	Certificate #1 Signature Totals	Hand Count Signature Totals	Pink Sheet/Other Observation	Reconciled?	Diff
BROADVIEW HTS -01-A	95	95			YES	0
BROADVIEW HTS -01-B	35	35			YES	0
BROADVIEW HTS -01-C	73	71	73		YES	0
BROADVIEW HTS -02-A	106	106			YES	0
BROADVIEW HTS -02-B	86	86			YES	0
BROADVIEW HTS -02-C	112	112			YES	0
BROADVIEW HTS -02-D	68	68			YES	0
BROADVIEW HTS -03-A	44	44			YES	0
BROADVIEW HTS -03-B	38	38			YES	0
BROADVIEW HTS -03-C	93	93			YES	0
BROADVIEW HTS -03-D	23	23			YES	0
BROADVIEW HTS -04-A	99	99			YES	0
BROADVIEW HTS -04-B	12	12			YES	0
BROADVIEW HTS -04-C	63	63			YES	0
BROADVIEW HTS -04-D	65	65			YES	0
FAIRVIEW PARK -01-A	50	50			YES	0
FAIRVIEW PARK -01-B	26	26			YES	0
FAIRVIEW PARK -01-C	26	26			YES	0
FAIRVIEW PARK -03-A	19	19			YES	0
FAIRVIEW PARK -03-B	47	47			YES	0
FAIRVIEW PARK -03-C	27	27			YES	0
GARFIELD HEIGHTS -03-A	27	27			YES	0
GARFIELD HEIGHTS -03-B	38	36	38	Pink memo - 2 voters did not sign	YES	0
GARFIELD HEIGHTS -03-C	31	31			YES	0
MIDDLEBURG HEIGHTS -01-A	9	9			YES	0
MIDDLEBURG HEIGHTS -01-B	3	3			YES	0
MIDDLEBURG HEIGHTS -01-C	5	5			YES	0
MIDDLEBURG HEIGHTS -01-D	7	7			YES	0
MIDDLEBURG HEIGHTS -02-A	14	14			YES	0
MIDDLEBURG HEIGHTS -02-B	21	21			YES	0

**Poll Book Justification**

<b>Precinct</b>	<b>Ballots Cast</b>	<b>Certificate #1 Signature Totals</b>	<b>Hand Count Signature Totals</b>	<b>Pink Sheet/Other Observation</b>	<b>Reconciled?</b>	<b>Diff</b>
MIDDLEBURG HEIGHTS -02-C	12	12			YES	0
MIDDLEBURG HEIGHTS -03-A	16	16			YES	0
MIDDLEBURG HEIGHTS -03-B	5	5			YES	0
MIDDLEBURG HEIGHTS -03-C	6	6			YES	0
MIDDLEBURG HEIGHTS -04-A	24	24			YES	0
MIDDLEBURG HEIGHTS -04-B	16	16			YES	0
MIDDLEBURG HEIGHTS -04-C	10	10			YES	0

Ballot Reconciliation								
PRECINCT	Ballots Ordered	Ballots Used	Ballots Cast	Unused Ballots	Soiled/ Defaced	Provisionals	Reconciled?	Diff (Abs)
BROADVIEW HTS -01-A	1105	98	95	1,007	1	2	YES	0
BROADVIEW HTS -01-B	862	38	35	824		3	YES	0
BROADVIEW HTS -01-C	1175	80	73	1,095	2	5	YES	0
BROADVIEW HTS -02-A	1083	112	106	971	2	4	YES	0
BROADVIEW HTS -02-B	722	89	86	633	1	2	YES	0
BROADVIEW HTS -02-C	1131	117	112	1,014	2	3	YES	0
BROADVIEW HTS -02-D	842	70	68	772		2	YES	0
BROADVIEW HTS -03-A	886	47	44	839	2	1	YES	0
BROADVIEW HTS -03-B	734	42	38	692		4	YES	0
BROADVIEW HTS -03-C	1240	95	93	1,145		2	YES	0
BROADVIEW HTS -03-D	742	27	23	715		4	YES	0
BROADVIEW HTS -04-A	1264	106	99	1,158		7	YES	0
BROADVIEW HTS -04-B	471	12	12	459			YES	0
BROADVIEW HTS -04-C	967	67	63	900	1	3	YES	0
BROADVIEW HTS -04-D	1025	65	65	960			YES	0
FAIRVIEW PARK -01-A	866	53	50	813	1	2	YES	0
FAIRVIEW PARK -01-B	840	27	26	813	1		YES	0
FAIRVIEW PARK -01-C	856	28	26	828		2	YES	0
FAIRVIEW PARK -03-A	972	24	19	948	1	4	YES	0
FAIRVIEW PARK -03-B	1076	50	47	1,026		3	YES	0
FAIRVIEW PARK -03-C	958	32	27	926		5	YES	0
GARFIELD HEIGHTS -03-A	749	28	27	721		1	YES	0
GARFIELD HEIGHTS -03-B	832	39	38	793		1	YES	0
GARFIELD HEIGHTS -03-C	921	36	31	885	1	4	YES	0
MIDDLEBURG HEIGHTS -01-A	993	9	9	984			YES	0
MIDDLEBURG HEIGHTS -01-B	805	4	3	801	1		YES	0
MIDDLEBURG HEIGHTS -01-C	622	5	5	617			YES	0
MIDDLEBURG HEIGHTS -01-D	1114	7	7	1,107			YES	0
MIDDLEBURG HEIGHTS -02-A	1101	14	14	1,087			YES	0
MIDDLEBURG HEIGHTS -02-B	903	21	21	882			YES	0

Ballot Reconciliation								
PRECINCT	Ballots Ordered	Ballots Used	Ballots Cast	Unused Ballots	Soiled/ Defaced	Provisionals	Reconciled?	Diff (Abs)
MIDDLEBURG HEIGHTS -02-C	709	12	12	697			YES	0
MIDDLEBURG HEIGHTS -03-A	976	17	16	959		1	YES	0
MIDDLEBURG HEIGHTS -03-B	905	5	5	900			YES	0
MIDDLEBURG HEIGHTS -03-C	1051	6	6	1,045			YES	0
MIDDLEBURG HEIGHTS -04-A	824	27	24	797		3	YES	0
MIDDLEBURG HEIGHTS -04-B	847	16	16	831			YES	0
MIDDLEBURG HEIGHTS -04-C	795	14	10	781		4	YES	0