

# Transposition of Votes from the 2009 Provincial General Election and Subsequent By-Elections to 2012 Electoral District Boundaries

## **Methodology**

To determine which party came first and which came second within the new Electoral District

boundaries, the following methodology was proposed to the Election Commission and approved.

The base data used for the new calculation was prepared as follows:

For each electoral district that existed on June 9th 2009,

- 1) The final list of electors (includes electors added to the list on election day) as posted
  
- 2) The Civic Address database and civic spatial address distribution as of June 9th, 2009
  
- 3) The poll by poll results for each electoral district save and except the five electoral districts that experienced by-elections following the 2009 general election:
  - a. The number of electors on the final list of electors for each poll. (includes voters added on election day)
  - b. The number of electors on the final list of electors for each Advance Polling District. (This number is a summation of the number of electors on the final list of electors for each poll within an Advance polling District)
  - c. The total number of votes cast at each election day poll, Advance Poll, Write-in poll and Special Poll, for each recognized party that fielded a candidate in the electoral district, and for each independent candidate.
  
- 4) For the five electoral districts of Antigonish, Inverness, Glace Bay, Yarmouth, Cumberland and Cape Breton North, the poll by poll results and data from the by-elections was employed.

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The geographic map layers to be used with the Electoral Boundary Tool included:

- 1) Electoral District Boundaries as of third reading 2012
  
- 2) Polling Divisions Boundaries in each Electoral District used in the 2009 general election or subsequent by-election
  
- 3) Boundaries of each Advance Polling Districts in each Electoral District used in the 2009 general election or subsequent by-election.

Using the 2009 registered electors and civic addresses with the Electoral District Boundary Tool to:

- 1) Overlay the boundaries of Electoral District boundaries of 2012 over those used in the 2009 general election where polling divisions are wholly contained within the electoral district.
  
- 2) Wherever a 2009 polling division was split by the boundary of a 2012 district, the tool calculated the proportion of the electors for each split area in the following manner:  
For each portion of a split polling division,
  - a. extract the civic addresses located within each split of the polling division area.
  - b. sum up the registered electors living at each civic address in the split polling division and sum up the electors living that piece.
  - c. determine the number and proportion of the 2009 registered electors resident within this piece versus the total electors within the polling division.
  - d. The proportional distribution of registered electors for each piece will be multiplied by the votes cast for each party in the poll as a whole and the resultant number of votes will be attributed to the 2012 electoral district that incorporates that piece of the polling division.

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3) This methodology was applied to the votes cast in each Advance Poll using the split to the Advance Polling district instead of the splits to the polling divisions encompassed by the Advance Poll. The tool calculated the proportion of the registered electors for each Advance Poll District split area and consequently the percentage of advance votes cast for each party in each split. Those votes were then attributed to the 2012 electoral district that incorporates that portion of the Advance Poll District.

4) Similarly the methodology was applied to the votes cast in the Special Poll and Write-in Poll using the split to the 2009 electoral district boundary. The proportion of the registered electors for each electoral district split area was calculated as was the percentage of special and write-in votes cast for each party. Those votes were attributed to the 2012 electoral district that incorporates the split.

5) If a polling division or an Advance District was not split by the boundary of a 2012 district, then 100% of the votes cast for that division or district are attributed to the 2012 electoral district that incorporates that area.

6) When all votes were re-distributed as above into the new 2012 Electoral District boundaries the total votes cast for each party was summed up and the parties who came first and second were determined.

Using this methodology, Elections Nova Scotia has compiled the results using the electoral district boundaries as proposed in the final report of the Boundaries Commission.

7) In the five electoral districts that experienced by-elections following the 2009 general election, the votes cast in the by-election were used to determine which parties finished first and second within the 2012 electoral district. In cases where an these electoral

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districts have been split, the distribution of the votes among candidates in the split areas was calculated as described based on the results of the by-election in that area.

To maintain continuity, these percentages were applied to the number of electors in that area during the 2009 general election, before being added to the totals of the areas being joined in the new electoral district that did not experience a by-election.

Re-distributed Vote Counts Based on Provincial General Election June 2009 and Subsequent By-Elections

2012-Electoral Districts		Total Resdistributed Votes						Party Position		Ordinary and Mobile Polls Votes						Special Polls Votes						Write in Ballots Votes						Advance Polls Votes					
ED-No.	ED Name	GPNS	NDP	NSLP	PC	Ind. **	Atlantica Party	First	Second	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party
01	Annapolis	215	1378	7259	1103	0	0	NSLP	NDP	193	1216	6150	922	0	0	1	5	57	13	0	0	0	12	106	21	0	0	21	145	946	147	0	0
02	Antigonish	66	3017	1675	2631	0	0	NDP	PC	63	2609	1370	2219	0	0	0	121	52	81	0	0	0	30	12	26	0	0	3	257	241	305	0	0
03	Argyle-Barrington	128	2957	1079	3832	0	0	PC	NDP	119	2705	954	3417	0	0	3	38	17	129	0	0	1	31	50	74	0	0	5	183	58	212	0	0
04	Bedford	211	2803	3970	1870	0	0	NSLP	NDP	177	2294	3189	1497	0	0	8	108	174	76	0	0	1	20	32	30	0	0	25	381	575	267	0	0
05	Cape Breton Centre	118	5738	913	537	0	0	NDP	NSLP	99	4627	695	395	0	0	4	126	26	18	0	0	0	114	22	11	0	0	15	871	170	113	0	0
06	Cape Breton-Richmond	106	2419	3620	1705	0	0	NSLP	NDP	93	2162	3092	1478	0	0	2	36	61	28	0	0	0	19	114	35	0	0	11	202	353	164	0	0
07	Chester-St. Margaret's	320	4589	1964	2645	0	0	NDP	PC	292	4018	1700	2140	0	0	6	57	27	54	0	0	0	27	14	24	0	0	22	487	223	427	0	0
08	Clare-Digby	126	2159	6043	1166	0	0	NSLP	NDP	109	1948	5213	995	0	0	4	49	154	32	0	0	0	21	70	10	0	0	13	141	606	129	0	0
09	Clayton Park West	146	3172	4300	1128	35	0	NSLP	NDP	123	2521	3349	864	31	0	7	170	246	74	3	0	0	23	53	16	0	0	16	458	652	174	1	0
10	Colchester-Musquodoboit Valley	181	3697	1649	2265	0	0	NDP	PC	166	3411	1502	2018	0	0	4	61	28	56	0	0	1	10	9	19	0	0	10	215	110	172	0	0
11	Colchester North	161	2362	1250	3811	0	0	PC	NDP	146	2131	1046	3267	0	0	2	12	23	53	0	0	0	8	7	32	0	0	13	211	174	459	0	0
12	Cole Harbour-Eastern Passage	238	4783	1155	1098	0	0	NDP	NSLP	210	3965	971	929	0	0	8	260	62	32	0	0	0	32	5	6	0	0	20	526	117	131	0	0
13	Cole Harbour-Portland Valley	224	6146	2058	1138	0	0	NDP	NSLP	202	5163	1670	927	0	0	5	101	39	26	0	0	3	200	62	43	0	0	14	682	287	142	0	0
14	Cumberland North	111	2912	1003	1246	1938	0	NDP	Ind	100	2576	800	1035	1618	0	3	78	36	68	118	0	0	2	6	9	15	0	8	256	161	134	187	0
15	Cumberland South	16	534	2235	3375	221	0	PC	NSLP	16	475	1686	2630	192	0	0	13	161	172	10	0	0	3	32	42	1	0	0	43	356	531	18	0
16	Dartmouth East	177	3713	4061	902	0	0	NSLP	NDP	153	3060	3303	685	0	0	4	117	109	47	0	0	2	44	52	12	0	0	18	492	597	158	0	0
17	Dartmouth North	205	4053	2316	568	0	0	NDP	NSLP	168	3224	1812	440	0	0	10	233	144	24	0	0	3	120	96	25	0	0	24	476	264	79	0	0
18	Dartmouth-Preston	81	2216	2242	1233	0	0	NSLP	NDP	70	1913	1887	977	0	0	2	57	70	98	0	0	0	29	35	6	0	0	9	217	250	152	0	0
19	Dartmouth South	273	4607	2313	1098	0	0	NDP	NSLP	233	3752	1856	834	0	0	7	135	65	46	0	0	0	46	19	12	0	0	33	674	373	206	0	0
20	East Nova	91	3914	1743	1974	0	0	NDP	PC	90	3410	1467	1694	0	0	0	61	71	55	0	0	0	65	44	55	0	0	1	378	161	170	0	0
21	Eastern Shore	191	3503	950	2527	0	0	NDP	PC	167	2945	816	2249	0	0	2	49	19	47	0	0	0	20	4	13	0	0	22	489	111	218	0	0
22	Fairview-Clayton Park	185	4197	2375	773	16	0	NDP	NSLP	170	3570	1859	609	14	0	6	212	160	52	1	0	0	26	32	8	0	0	9	389	324	104	1	0
23	Glace Bay	0	2277	3901	759	195	56	NSLP	NDP	0	1699	2894	557	152	49	0	180	278	47	19	1	0	87	155	30	9	1	0	311	574	125	15	5
24	Halifax Armdale	239	3469	1578	806	0	0	NDP	NSLP	225	2927	1382	698	0	0	4	151	48	24	0	0	0	18	6	3	0	0	10	373	142	81	0	0
25	Halifax Atlantic	270	4313	1413	697	0	0	NDP	NSLP	248	3835	1159	605	0	0	5	109	74	25	0	0	1	24	9	2	0	0	16	345	171	65	0	0
26	Halifax Chebucto	413	4818	2764	703	0	0	NDP	NSLP	378	4099	2340	584	0	0	12	202	136	32	0	0	3	67	28	12	0	0	20	450	260	75	0	0
27	Halifax Citadel-Sable Island	287	3232	2240	838	0	0	NDP	NSLP	247	2684	1752	647	0	0	12	132	119	38	0	0	3	67	53	22	0	0	25	349	316	131	0	0
28	Halifax Needham	319	5013	1632	491	0	0	NDP	NSLP	279	4346	1405	422	0	0	5	202	62	25	0	0	3	39	10	4	0	0	32	426	155	40	0	0
29	Hammonds Plains-Lucasville	144	2526	1782	1238	0	0	NDP	NSLP	128	2084	1523	1003	0	0	3	55	22	22	0	0	0	17	6	7	0	0	13	370	231	206	0	0
30	Hants East	231	6052	1467	1567	0	0	NDP	PC	211	5482	1293	1409	0	0	0	81	19	21	0	0	0	12	2	6	0	0	20	477	153	131	0	0
31	Hants West	204	2401	3065	3364	0	0	PC	NSLP	188	2146	2644	2938	0	0	5	50	95	84	0	0	0	14	35	28	0	0	11	191	291	314	0	0
32	Inverness	210	1564	2944	2811	0	0	NSLP	PC	189	1355	2613	2502	0	0	4	52	54	71	0	0	2	15	37	30	0	0	15	142	240	208	0	0
33	Kings North	378	3535	1541	3079	0	0	NDP	PC	346	3136	1291	2545	0	0	4	66	37	101	0	0	2	20	23	36	0	0	26	313	190	397	0	0
34	Kings South	369	4038	2639	2759	0	0	NDP	PC	324	3403	2255	2339	0	0	7	110	55	63	0	0	4	42	33	22	0	0	34	483	296	335	0	0
35	Kings West	149	1422	5015	1667	0	0	NSLP	PC	132	1261	4165	1410	0	0	2	29	116	55	0	0	0	4	87	41	0	0	15	128	647	161	0	0
36	Lunenburg	145	4069	1374	2399	489	0	NDP	PC	127	3673	1206	2122	459	0	8	100	34	55	8	0	0	45	13	46	0	0	10	251	121	176	22	0
37	Lunenburg West	165	4031	2399	3202	0	0	NDP	PC	152	3588	2102	2810	0	0	2	112	74	94	0	0	0	44	58	52	0	0	11	287	165	246	0	0
38	Northside-Westmount	43	2940	1821	4251	0	68	PC	NDP	37	2260	1374	3063	0	54	1	107	71	117	0	1	0	79	31	186	0	1	5	494	345	885	0	12
39	Pictou Centre	147	3650	567	3519	0	0	NDP	PC	132	3005	476	2881	0	0	5	170	23	171	0	0	0	81	12	53	0	0	10	394	56	414	0	0
40	Pictou East	129	4893	642	1984	0	0	NDP	PC	118	4351	583	1722	0	0	2	85	13	52	0	0	3	30	4	39	0	0	6	427	42	171	0	0
41	Pictou West	170	4226	1471	1466	0	0	NDP	NSLP	148	3741	1260	1201	0	0	0	79	26	41	0	0	1	51	22	22	0	0	21	355	163	202	0	0
42	Queens-Shelburne	117	5239	1651	2414	0	0	NDP	PC	104	4656	1431	1987	0	0	3	110	18	74	0	0	0	70	16	58	0	0	10	403	186	295	0	0
43	Sackville	124	3588	1047	1303	0	0	NDP	PC	112	2929	896	1138	0	0	2	61	26	25	0	0	0	20	7	7	0	0	10	578	118	133	0	0

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ED-No.	ED Name	GPNS	NDP	NSLP	PC	Ind. **	Atlantica Party	First	Second	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party	GPNS	NDP	NSLP	PC	Ind.	Atlantica Party
44	Sackville-Cobequid	192	5124	1549	978	0	0	NDP	NSLP	166	4431	1299	812	0	0	5	167	45	47	0	0	2	32	7	7	0	0	19	494	198	112	0	0
45	Sydney	186	5774	3724	887	0	0	NDP	NSLP	150	4579	2748	657	0	0	5	205	132	44	0	0	1	153	63	11	0	0	30	837	781	175	0	0
46	Sydney River-Mira-Louisbourg	138	3141	2796	3586	0	0	PC	NDP	125	2709	2180	2873	0	0	3	45	74	95	0	0	0	15	47	97	0	0	10	372	495	521	0	0
47	Timberlea-Prospect	202	5602	1337	679	0	0	NDP	NSLP	177	5012	1161	606	0	0	5	110	38	11	0	0	2	10	4	3	0	0	18	470	134	59	0	0
48	Truro-Bible Hill	158	4070	1643	2544	0	0	NDP	PC	135	3489	1294	1977	0	0	0	96	65	92	0	0	2	41	19	42	0	0	21	444	265	433	0	0
49	Victoria-The Lakes	164	2152	2215	2919	97	4	PC	NSLP	147	1925	1968	2517	91	3	6	25	17	61	2	0	2	11	18	64	0	0	9	191	212	277	4	1
50	Waverley-Fall River-Beaver Bank	168	4198	1932	1479	0	0	NDP	NSLP	155	3407	1568	1232	0	0	3	75	33	22	0	0	0	22	5	3	0	0	10	694	326	222	0	0
51	Yarmouth	48	513	3986	2628	673	19	NSLP	PC	45	434	3330	2261	570	18	0	25	186	122	46	1	1	4	139	37	6	2	50	331	208	51	0	

\*\* Ind. = Independent Candidate