

Transposition of Votes from the 44th General Election to the 2023 Representation Orders



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Summary

- This report summarizes the transposition of the results of the 44th general election in 2021 to the new boundaries established by the 2023 decennial Federal Electoral District (FED) boundary readjustment process.
- This transposition is required under subsection 41(1) of the *Canada Elections Act*.
- The results must be transposed because registered parties that have endorsed candidates in a FED in the previous general election have the right to provide lists of names of persons suitable to be appointed as election officers in that FED. After a decennial FED boundary readjustment, the determination as to which registered parties have the right to provide lists of names is based on a transposition of the results of the previous general election, which for this report was the 44th general election held on September 21, 2021, onto the new electoral map.
- In cases where the returning officer receives a number of names from registered parties that is greater than the number of election officers remaining to be appointed, appointment will be made as far as possible in the same proportion as the votes received after the transposition exercise.
- There will be 343 FEDs under the 2023 representation orders (compared to 338 FEDs under the 2013 representation order). Out of those new 343 FEDs, 48 are FEDs from the 2013 representation order for which the boundaries were unchanged.
- The new FEDs and changed boundaries will come into effect when Parliament is dissolved for a general election called at least seven months after the representation orders are proclaimed. The earliest date is April 23, 2024.
- Additional information about the process of drawing the new FED boundaries can be found at the [Federal Electoral Districts Redistribution 2022](#) website.
- An interactive visualization of the transposed results [is available here](#).

Introduction

After each decennial census of population by Statistics Canada, the representation of the provinces is readjusted in accordance with the [Constitution Act, 1867](#) and the [Electoral Boundaries Readjustment Act](#). An independent boundaries commission is established for each province to consider and report on any changes required to the boundaries of the Federal Electoral Districts (FEDs). Each FED corresponds to a seat in the House of Commons in Parliament. As Yukon, the Northwest Territories and Nunavut constitute only one FED each, they do not require electoral boundaries commissions.

The FEDs in this report were proclaimed by the representation orders of September 22, 2023. The new map and new electoral districts will come into effect when Parliament is dissolved for a general election called at least seven months after the representation orders were proclaimed. The earliest date is April 23, 2024. Any by-election called before the next general election will take place under the current electoral map (following the 2013 representation order, with 338 electoral districts).

According to [subsection 41\(1\)](#) of the [Canada Elections Act](#) (the Act), the Chief Electoral Officer (CEO) shall, in each of the 343 new FEDs (referred to hereafter as new FEDs), determine which registered political parties have the right to provide the returning officer in that FED with a list of names of qualified persons to act as election officers during the first general election held under the new electoral map.

The objective of this report is to meet the requirements of subsection 41(1) of the Act. The right to recommend election officers in a FED is granted to every political party that endorsed a candidate in the FED in the previous election, in accordance with subsection 33(1) of the Act. After the proclamation of a representation order, for new FEDs and FEDs where the boundaries were revised, any party that had endorsed a candidate in any part of the old FED, or region of the new FED, is considered to have endorsed a candidate for the purpose of subsection 33(1) of the Act. Section 33(3) of the Act requires the CEO to calculate the proportion of votes for every party in the event that the number of names submitted to a returning officer exceeds the number of election officers remaining to be appointed.

In the context of electoral boundary redistribution, the results from a previous general election must be transposed to the boundaries of the new FEDs to calculate the proportion of votes for each party and identify eligible parties to nominate election officers.

The transposition of votes process calculates the number of votes that each registered political party, at the 44th general election on September 21, 2021, would have obtained if electors had voted for the same political parties but under the new FED boundaries.

Methods

This transposition of votes process estimates how the votes cast in the 2021 general election would have been distributed among the new FEDs under the 2023 representation orders. This section summarizes the methods used by Elections Canada to determine how to distribute all votes.

The [Official Voting Results \(OVR\)](#) of the September 21, 2021, general election were published at the polling station (PS) level for each FED. These results are the ones being transposed to the new FEDs in this report. To understand how OVR are transposed, a few concepts about the recording of the results need to be outlined.

1. PSs are subunits within a FED.¹ Before each election, PS boundaries are drawn such that there is no overlap between any two PSs and that PSs cover the entire area of each FED.
2. For advance polls, polling stations are combined to form advance polling stations (APSs). An APS will combine the electors of one or more election day PS. Each election day PS can belong to only one APS.
3. Each FED also reports the number of Special Voting Rules (SVR) ballots (ballots cast by Canadian Forces electors, incarcerated and international electors, and national and local electors voting by mail or at a local Elections Canada office) recorded at its level.

As the OVR varies by voting method (election day poll, advance voting poll, SVR), this report used a slightly different methodology for each type.

The boundaries of 48 FEDs remain unchanged from the 2013 representation order; the list of unchanged FEDs is available in Appendix A. Thus, the transposition of votes to the new representation order for these FEDs is only a restatement of the results of the previous general election.

For the remaining 295 new FEDs, votes were directly reallocated by restating the voting results of the PSs to the corresponding new FEDs. For the PSs that were split by new FED boundaries, the reallocation of votes was done proportionally, using estimates derived from the number of registered electors' addresses in a given area that used each type of voting method. Elections Canada has the addresses of registered electors and, for the purpose of electoral integrity, knows which electors from the National

¹ Polling divisions and PSs normally describe the same area; however, they will differ when splits or merges of polling divisions are required in the field to accommodate operational requirements. The votes are recorded at the PS level to take the splits and merges into consideration.

Register of Electors have cast a vote. The actual vote cast by every elector is secret, and the ballot used by an elector cannot be linked to that same elector.

The results of the transposition of votes were subjected to several quality control tests, such as confirming that the votes by province and by political party remained unchanged. While the secrecy of the vote prevents a transposition exercise to be 100 per cent accurate, Elections Canada is confident in the overall quality of the results presented in this report.

The next sections present a high-level description of the methodology used to transpose the votes cast on election day, during advance voting days and by special ballot. Detailed calculation examples, illustrating how Elections Canada used electors' address data to support the calculation of the transposition of votes for each type of voting method, are provided in Appendix B.

Votes Cast on Election Day

In the 2021 general election, 10,246,196 ballots were cast on election day. To calculate the transposed number of votes in each FED under the 2023 representation orders, Elections Canada applied the following two-step method:

1. Starting with the addresses of the electors who voted on election day, the proportion of voters from each PS under the 2013 representation order that was assigned to a new FED under the 2023 representation orders was calculated.
2. The votes from each PS under the 2013 representation order were allocated for each political party by multiplying the total number of votes for the party in each PS by the proportion of voters from that PS that was assigned to the new FED (calculated during Step 1 above).

This calculation approximates the number of votes from the 44th general election that each political party would have received in the new FED under the 2023 representation orders. The secrecy of the vote prevents a more precise redistribution of results from being calculated.

Elections Canada was able to calculate the ratios at the PS level for election day polls because voting results are available at this geographic level. A detailed example of this calculation method is presented in Appendix B.

Votes Cast During Advance Voting

In the 2021 general election, 5,895,072 ballots were cast over the four advance voting days. Calculating the number of transposed votes for advance voting follows a two-step method, similar to the calculation presented above for election day voting.

1. Starting with the addresses of the electors who voted on the advance voting days, the proportion of voters from each APS under the 2013 representation order that was assigned to a new FED under the 2023 representation orders was calculated (similar to the calculation for the votes cast on election day).
2. The votes from each APS under the 2013 representation order were allocated for each political party by multiplying the total number of votes for the party in each APS by the proportion of voters from that APS that was assigned to the new FED (calculated during Step 1 above).

This calculation approximates the number of votes from the 44th general election that each political party would have received in the new FEDs under the 2023 representation orders. The secrecy of the vote prevents a more precise redistribution of results from being calculated.

Again, Elections Canada was able to calculate the ratios at the APS level for advance polls because voting results are available at this geographic level. A calculation example is presented in Appendix B.

Votes Cast Using the Special Voting Rules

As previously stated, SVR votes are ballots cast by Canadian Forces electors, incarcerated electors, electors voting from abroad and electors voting in Canada who choose to vote by mail or at a local Elections Canada office inside or outside their FED. The number of SVR votes in the 44th general election was 1,068,543, a historic high due in large part to the COVID-19 pandemic.²

This case is different than both election day and advance voting because the results for SVR ballots are reported only at the FED level. However, every SVR voter is tied to an address in the FED in which they are voting. To calculate the transposed number of SVR votes, a similar ratio to that used above, but now between the different FEDs from the 2013 and 2023 representation orders, was calculated using the transposed electors list; it was then applied to the number of SVR votes cast for each political party. See Appendix B for a detailed calculation example.

Rejected Ballots

In the 44th general election, there were 175,568 rejected ballots, representing 1 per cent of all ballots cast. Ballots are rejected if they were not supplied by an election officer, were improperly marked (including those voided by the elector), were cast for a person other than a candidate or there is any writing or mark by which the elector could be identified. In this report, the number of rejected ballots was also transposed, achieving an accurate report on the transposed turnout by FED under the 2023 representation orders. The estimated numbers of rejected ballots (election day,

² Elections Canada, [Special Ballot Report: 44th General Election](#), 2022.

advance and SVR) in the new FED under the 2023 representation orders were transposed using the same proportions used to transpose the votes.

Additional Methodological Considerations

Before presenting the detailed results, here are a few additional comments regarding the calculation.

- **Rounding:** In the event that the total number of votes transposed had a fractional value, the reported results were rounded to the nearest integer. As a result, the number of votes transposed by province or for Canada may not correspond exactly to the number of ballots cast.
- **Voter turnout:** Even though the transposed voter turnout calculation is beyond the scope of the work required to meet the requirements of subsection 41(1) of the Act, an estimation of the transposed voter turnout is provided at the FED level under the 2023 representation orders. The number of electors was transposed just as the number of votes was transposed; then the total number of received ballots was divided by the total number of electors in each PS to calculate the turnout.

Highlighted Results

The methodology presented above produced the transposed voting results for each political party in each FED under the 2023 representation orders. These detailed results (including the estimated transposed voter turnouts) can be accessed in the Additional Data section of this report. The goal of this section is to summarize the key results of the transposition exercise.

Table 1 below presents the distribution of the number of seats, broken down by province and territory under the 2013 and 2023 representation orders, as well as the corresponding changes to the number of seats. This table shows that, in the 2023 representation orders, there are five additional FEDs (one in Ontario, three in Alberta and one in British Columbia) for a total of 343, compared to 338 in 2013.

Table 1: Change in Number of Seats by Province and Territory

Province/Territory	2013 Rep. Order	2023 Rep. Orders	Difference
Newfoundland and Labrador	7	7	0
Prince Edward Island	4	4	0
Nova Scotia	11	11	0
New Brunswick	10	10	0
Quebec	78	78	0
Ontario	121	122	+1
Manitoba	14	14	0
Saskatchewan	14	14	0
Alberta	34	37	+3
British Columbia	42	43	+1
Yukon	1	1	0
Northwest Territories	1	1	0
Nunavut	1	1	0
Total	338	343	+5

Table 2 below compares the number of seats won by parties during the 44th general election and the estimated transposed results under the 2023 representation orders.

After the transposition of votes, the Liberal Party of Canada is estimated to have a difference of -3 first-place FEDs, the Conservative Party of Canada is estimated to have a difference of +7 first-place FEDs, the Bloc Québécois is estimated to have a difference of +2 first-place FEDs, the New Democratic Party has a difference of -1 first-place FED and there is no difference for the Green Party of Canada.

Table 2: Comparison of the Total Seats Won by Political Parties During the 44th General Election with the Estimated Transposed Results Under the 2023 Representation Orders

Seats	Liberal Party of Canada	Conservative Party of Canada	Bloc Québécois	New Democratic Party	Green Party of Canada	Total
Seats won during the 44th general election	160	119	32	25	2	338
Estimated number of seats under the 2023 representation orders	157	126	34	24	2	343
Difference	-3	+7	+2	-1	0	+5

Conclusion

To fulfill its requirements under [subsection 41\(1\)](#) of the Act, Elections Canada has written and released this report describing the methods and outcomes of the transposition of results. In the 2023 representation orders, there are five additional FEDs, bringing the total number of seats to 343. Of the 338 FEDs in the 2013 representation order, only 48 were not revised in the 2023 representation orders. The 2023 representation orders will come into effect when Parliament is dissolved for a general election called at least seven months after the representation orders were proclaimed. The earliest date is April 23, 2024.

The parties that endorsed a candidate in a previous election in a FED have the right to provide a list of names of qualified persons to act as election officers to the returning officer in that FED. Elections Canada has transposed the proportion of votes recorded during the 44th general election for each of the parties in each of the 343 FEDs that will be effective under the 2023 representation orders. To do this, the addresses of registered electors were used to produce the most accurate estimate of reallocated votes in each FED under the 2023 representation orders. It is important to note that the vote is secret, and, therefore, it is impossible to link any elector's address to an individual ballot.

While the transposition exercise cannot be 100 per cent accurate, Elections Canada is confident in the quality and integrity of the results presented in this report. These results will be used to ensure that registered political parties can exercise their right to provide returning officers with lists of persons to be appointed as election officers during the first general election held under the 2023 representation orders.

Additional data, and a detailed explanation of the methodology used in this report, are available in the following sections: Additional Data, Appendix A and Appendix B.

Additional Data

The complete transposed results by political party, including rejected ballots and estimated voter turnout at the FED level, are available here:

- Tables of transposed votes by political party and by FED under the 2023 Representation Orders (CSV format):
 - [Format 1: Transposition 343 FED](#) – Long form list where each row is a separate political party’s transposed votes in every FED
 - [Format 2A: Transposition 343 FED Percentage](#) – Liste grand format – Wide form list of transposed votes expressed as a percentage of the votes received where each column is a political party, and each row is a FED
 - [Format 2B: Transposition 343 FED Vote Count](#) – Wide form list of transposed votes where each column is a political party, and each row is a FED
- FED summary: list of every FED with the transposed registered electors, transposed votes, transposed rejected ballots, estimated turnout, and the estimated first-place political party (CSV format):
 - [Transposition 343 FED Summary](#)

Appendix A—Federal Electoral Districts with Unchanged Boundaries

Table 3 below presents a list of the 48 FEDs from the 2023 representation orders whose boundaries remain unchanged from the 2013 representation order.

Table 3: FEDs Unchanged by the 2023 Representation Orders by Province and Territory

Province/Territory	Name
Newfoundland and Labrador	- Labrador
Nova Scotia	- Cumberland—Colchester
Quebec	- Abitibi—Baie-James—Nunavik—Eeyou - Abitibi—Témiscamingue - Beauce - Bourassa - Brome—Missisquoi - Brossard—Saint-Lambert - Côte-Nord—Kawawachikamach—Nitassinan* - Drummond - La Pointe-de-l'Île - Lac-Saint-Louis - Laval—Les Îles - Longueuil—Charles-LeMoine - Longueuil—Saint-Hubert - Marc-Aurèle-Fortin - Papineau - Pierre-Boucher—Les Patriotes—Verchères - Pierrefonds—Dollard - Richmond—Arthabaska - Rosemont—La Petite-Patrie - Saint-Hyacinthe—Bagot—Acton* - Saint-Jean - Saint-Maurice—Champlain - Shefford

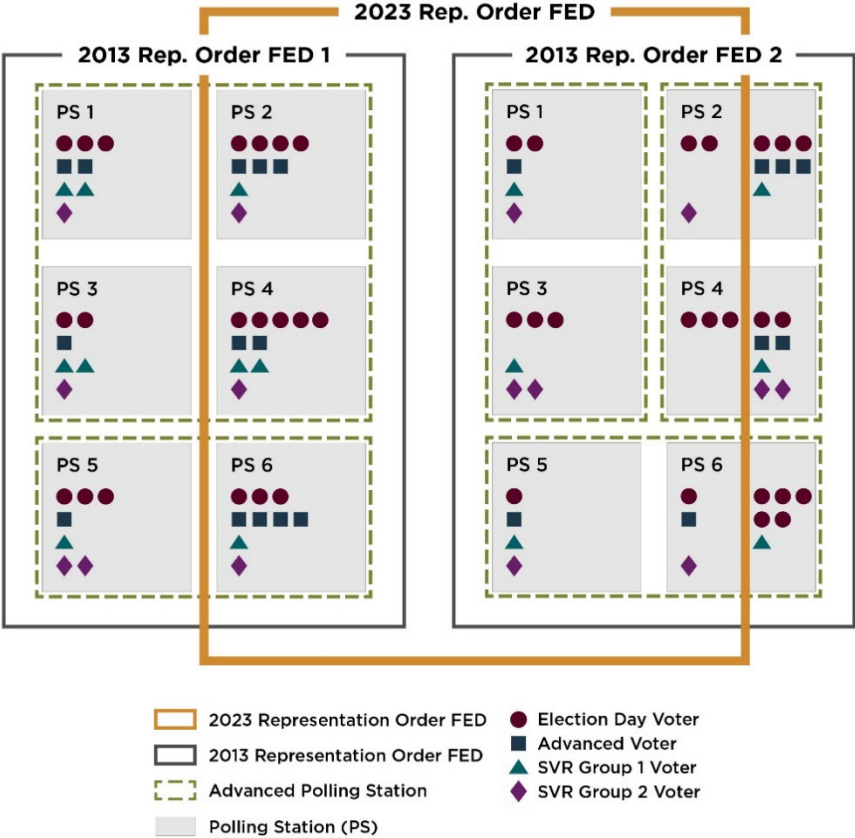
Province/Territory	Name
	- Trois-Rivières
Ontario	<ul style="list-style-type: none"> - Ajax - Algonquin—Renfrew—Pembroke* - Barrie South—Innisfil* - Bruce—Grey—Owen Sound - Burlington - Eglinton—Lawrence - Haldimand—Norfolk - Humber River—Black Creek - Huron—Bruce - Kitchener South—Hespeler - Leeds—Grenville—Thousand Islands—Rideau Lakes* - Oshawa - Perth—Wellington - Willowdale - York Centre
Alberta	- Lethbridge
British Columbia	<ul style="list-style-type: none"> - Skeena—Bulkley Valley - Vancouver East - Victoria
Yukon	- Yukon
Northwest Territories	- Northwest Territories
Nunavut	- Nunavut

*Indicates that the name of the FED has changed since the 2013 representation order.

Appendix B—Fictional Calculation Examples

This section presents a fictional example of vote transposition to demonstrate the steps and detailed calculation methodologies used to transpose the results from each type of voting method. Figure 1 below is a fictional geographical representation of a 2023 representation orders FED whose boundaries overlap two 2013 representation order FEDs; assume that the two old FEDs have six PSs each. For each FED, fictional voters and the voting method used to cast their votes are represented. Following the figure, a series of tables demonstrate the calculations for each type of voter. These tables are *not* official Elections Canada results tables, and they do not represent any past or present FED.

Example Figure 1: Fictional Geographical Representation of a 2023 Representation Orders FED Whose Boundaries Overlap Two 2013 Representation Order FEDs



Votes Cast on Election Day

From Figure 1 above, the election day voters (the red circles) are identified. Then, for the purpose of this example, assume that there are two political parties, Party A and Party B. The following table shows a fictional distribution of election day votes by FED and by political party.

Example Table 1: Election Day Votes by Party A and Party B Under the Old FED

2013 Rep. Order FED	Election Day Votes for Party A	Election Day Votes for Party B
1	8	12
2	15	7

As voting results are available by voting type and political party at the PS level, Table 2 below shows the FED-level results, broken down into PS-level results, in Columns 1 to 4. The ratio of red circles in Figure 1 (election day voters) from each PS that is transferred to the new FED is shown in Column 5. Columns 6 and 7 show the ratio of voters in the new FED multiplied by the number of votes for each party in the PS on election day. These last two columns show the number of votes transposed to the new FED.

Example Table 2: Election Day Votes Being Transposed to the New FED

2013 Rep. Order FED	Election Day PS ³	Party A	Party B	Proportion of Election Day Voters from Each PS Assigned to the New FED	Party A—Votes Reallocated to the New FED	Party B—Votes Reallocated to the New FED
1	1	2	1	$0/3 = 0.00$	$2*0 = 0.00$	$1*0 = 0.00$
1	2	2	2	$4/4 = 1.00$	$2*1 = 2.00$	$2*1 = 2.00$
1	3	1	1	$0/2 = 0.00$	$1*0 = 0.00$	$1*0 = 0.00$
1	4	2	3	$5/5 = 1.00$	$2*1 = 2.00$	$3*1 = 3.00$
1	5	1	2	$0/3 = 0.00$	$1*0 = 0.00$	$2*0 = 0.00$

³ In this fictional example, all the votes in some PSs are allocated to one party. In a real election, PSs where all votes are cast for one party would be merged with another PS before the results were reported to preserve the confidentiality of the vote.

2013 Rep. Order FED	Election Day PS ³	Party A	Party B	Proportion of Election Day Voters from Each PS Assigned to the New FED	Party A—Votes Reallocated to the New FED	Party B—Votes Reallocated to the New FED
1	6	0	3	$3/3 = 1.00$	$0*1 = 0.00$	$3*1 = 3.00$
2	1	2	0	$2/2 = 1.00$	$2*1 = 2.00$	$0*1 = 0.00$
2	2	3	2	$2/5 = 0.40$	$3*(2/5) = 1.20$	$2*(2/5) = 0.80$
2	3	3	0	$3/3 = 1.00$	$3*1 = 3.00$	$0*1 = 0.00$
2	4	4	1	$3/5 = 0.60$	$4*(3/5) = 2.40$	$1*(3/5) = 0.60$
2	5	0	1	$1/1 = 1.00$	$0*1 = 0.00$	$1*1 = 1.00$
2	6	3	3	$1/6 = 0.17$	$3*(1/6) = 0.50$	$3*(1/6) = 0.50$

The total of the transposed voting results of election day voters for the new FED by party is summarized in Table 3 (totals from Columns 6 and 7 above).

Example Table 3: Total of Transposed Election Day Votes for the New FED

2023 Rep. Orders FED	Party A—Transposed Election Day Votes	Party B—Transposed Election Day Votes
1	13.10	10.90

After transposition, Party A is allocated 13.10 votes in the new FED, while Party B receives 10.90 votes.

Votes Cast During the Advance Voting Days

Similar to the votes cast on election day, the results from the advance voting days (the blue squares) can be identified in Figure 1 above. Table 4 shows a fictional distribution of votes at the APS level for each political party under the old FED.

Example Table 4: Advance Votes by Party A and Party B Under the Old FED

2013 Rep. Order FED	Advance Votes for Party A	Advance Votes for Party B
1	10	3
2	2	6

Table 5 below shows the FED-level results, broken down into APS-level results, in Columns 1 to 4. The ratio of advance voters from each APS transferred to the new FED is shown in Column 5. Columns 6 and 7 show the ratio of voters in the new FED multiplied by the number of votes for each party in the APS on the advance voting days.

Example Table 5: Advance Votes Being Transposed to the New FED

2013 Rep. Order FED	APS	Party A	Party B	Proportion of Advance Voters from Each APS Assigned to the New FED	Party A—Votes Reallocated to the New FED	Party B—Votes Reallocated to the New FED
1	1	6	2	$5/8 = 0.63$	$6*(5/8) = 3.75$	$2*(5/8) = 1.25$
1	2	4	1	$4/5 = 0.80$	$4*(4/5) = 3.20$	$1*(4/5) = 0.80$
2	1	0	1	$1/1 = 1.00$	$0*1 = 0.00$	$1*1 = 1.00$
2	2	2	3	$0/5 = 0.00$	$2*0 = 0.00$	$3*0 = 0.00$
2	3	0	2	$2/2 = 1.00$	$0*1 = 0.00$	$2*1 = 2.00$

The total of the transposed voting results of advance voters for the new FED by party is summarized in Table 6 (totals from Columns 6 and 7 above).

Example Table 6: Total of Transposed Advance Votes for the New FED

2023 Rep. Orders FED	Party A—Transposed Advance Votes	Party B—Transposed Advance Votes
1	6.95	5.05

After transposition, Party A is allocated 6.95 advance votes in the new FED, while Party B receives 5.05 advance votes.

Special Voting Rules

As mentioned earlier, different groups can use SVR voting: Canadian Forces electors and incarcerated, international, national and local electors voting by mail or at a local Elections Canada office. For simplicity’s sake, in this example we refer to two groups: SVR Group 1 and SVR Group 2. Recall that SVR voting results are available only at the FED level. Table 7 shows the fictional distribution of SVR Group 1 support for each political party at the FED level.

Example Table 7: Old FED SVR Group 1 Votes by Party A and Party B

2013 Rep. Order FED	SVR Group 1 Votes for Party A	SVR Group 1 Votes for Party B
1	5	4
2	2	4

In Table 8, SVR voting is broken down in Columns 1 to 3. SVR Group 1 in Figure 1 above is represented by the green triangles. The ratio of green triangles from each old FED that is transferred to the new FED is shown in Column 4. Columns 5 and 6 show the number of votes in the new FED multiplied by the ratio of votes for each party in the old FED from SVR Group 1.

Example Table 8: SVR Group 1 Votes Being Transposed to the New FED

2013 Rep. Order FED	Party A	Party B	Proportion of Voters from SVR Group 1 Assigned to the New FED	Party A—Votes Reallocated to the New FED	Party B—Votes Reallocated to the New FED
1	5	4	$4/9 = 0.44$	$5*(4/9) = 2.22$	$4*(4/9) = 1.78$
2	2	4	$3/6 = 0.50$	$2*(3/6) = 1.00$	$4*(3/6) = 2.00$

The total of the transposed voting results of SVR Group 1 voters for the new FED by party can be summarized in Table 9 (totals from Columns 5 and 6).

Example Table 9: Total of Transposed SVR Group 1 Votes for the New FED

2023 Rep. Orders FED	Party A— Transposed SVR Group 1 Votes	Party B— Transposed SVR Group 1 Votes
1	3.22	3.78

After transposition, Party A is allocated 3.22 SVR Group 1 votes in the new FED, while Party B receives 3.78 SVR Group 1 votes.

The above calculations are repeated for SVR Group 2. Table 10 shows the fictional distribution of SVR Group 2 support for each political party at the FED level.

Example Table 10: Old FED SVR Group 2 Votes by Party A and Party B

2013 Rep. Order FED	SVR Group 2 Votes for Party A	SVR Group 2 Votes for Party B
1	5	2
2	2	6

In Table 11, SVR voting is broken down in Columns 1 to 3. SVR Group 2 in Figure 1 above is represented by the purple diamonds. The ratio of purple diamonds from each old FED transferred to the new FED is shown in Column 4. Columns 5 and 6 show the number of votes in the new FED multiplied by the ratio of votes for each party in the old FED from SVR Group 2.

Example Table 11: SVR Group 2 Votes Being Transposed to the New FED

2013 Rep. Order FED	Party A	Party B	Proportion of Voters from SVR Group 2 Assigned to the New FED	Party A— Votes Reallocated to the New FED	Party B— Votes Reallocated to the New FED
1	5	2	$3/7 = 0.43$	$5*(3/7) = 2.14$	$2*(3/7) = 0.86$
2	2	6	$6/8 = 0.75$	$2*(6/8) = 1.50$	$6*(6/8) = 4.50$

The total of the transposed voting results of SVR Group 2 voters for the new FED by party is summarized in Table 12 (totals from Columns 5 and 6).

Example Table 12: Total of Transposed SVR Group 2 Votes for the New FED

2023 Rep. Orders FED	Party A— Transposed SVR Group 2 Votes	Party B— Transposed SVR Group 2 Votes
1	3.64	5.36

After transposition, Party A is allocated 3.64 SVR Group 2 votes in the new FED, while Party B receives 5.36 SVR Group 2 votes.

Due to the nature of the calculations, the transposed votes were often fractional totals. The results with fractional totals were verified by ensuring that the number of votes by province and by party were unchanged when compared with the results of the 44th general election.

As a final step, Elections Canada rounded the results because a fractional vote does not make logical sense. After rounding, it is likely that the total votes will differ from the OVR because the rounding will introduce slight increases or decreases. Table 13 shows the final, rounded transposed votes of all types for the new FED.

Example Table 13: Total Rounded Votes for the 2023 Rep. Orders FED

Type of Votes	Rounded Votes Party A	Rounded Votes Party B
Election Day	13	11
Advance	7	5
SVR Group 1	3	4
SVR Group 2	4	5

Rejected Ballots

In this example, we excluded rejected ballots for simplicity's sake. When a ballot is received and rejected, it is impossible to know which elector cast it, just as it is impossible to know which party an elector voted for. Therefore, a rejected ballot was transposed in the same way that the election day ballots were transposed. The number of rejected ballots in a PS was multiplied by the proportion of voters from the PS moving to a new FED. That number of rejected ballots was then transposed to the new FED, exactly as the votes for Party A and B were transposed.

Voter Turnout

As mentioned earlier in this report, even though calculating voter turnout was beyond the scope of work required for this transposition of votes exercise, an estimate of the voter turnouts was provided at the FED level alongside the transposition results. The

OVR provided the number of registered electors assigned to each PS needed for this calculation. These electors may have voted on election day, in advance, with SVR or not at all. We calculated a ratio of all registered electors in a PS who were reallocated to a new FED. To calculate turnout, we divided the total number of transposed ballots cast (including rejected) by the number of transposed registered electors.