

The Electoral Impact of the New Parliamentary Constituency Boundaries

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The review of parliamentary boundaries just completed is the sixth general review to be enacted since permanent, independent Boundary Commissions for each of the four constituent parts of the United Kingdom were established by the 1944 House of Commons (Redistribution of Seats) Act. In 2012 and 2018 boundary reviews were abandoned before being brought into force.

The Commissions began work in 2021 following the passing of the Parliamentary Constituencies Act 2020 and the publication of data from the electoral registers in force on 2 March 2020. Each Commission was obliged to report before 1 July 2023.

The number of electors as published for 2 March 2020 was used to determine the 'electoral quota'. This electoral quota is calculated by dividing the total electorate on that day by the number of constituencies currently in existence (650). For this review it was 73,392. Seats are allocated to each part of the UK proportionally. There is no longer a guaranteed minimum for any country.

The Commissions are then obliged to ensure that constituencies have an electorate within 5% of the electoral quota – that is between 69,724 and 77,062 electors. Just five 'island' seats are exempt from the '5% rule': Orkney and Shetland, Na h-Eileanan an Iar, Ynys Môn, and the two seats allocated to the Isle of Wight.

Following the application of the quota England was allocated 543 seats (an increase of 10); Scotland 57 (a decrease of two); and Northern Ireland 18 (no change). The UK wide quota was applied to Wales for the first time leading to a sharp reduction of eight, from 40 to 32, in the number of seats it was allocated.

The extent of change

The extent to which a constituency is changed as a result of boundary revisions can be measured by a simple **Index of Change**. In each case a 'base constituency' is identified - the old constituency which contributes most electors to the new constituency. The index is then calculated as the sum of the number of electors leaving and joining the base constituency in order to form the new constituency, expressed as a percentage of the total electorate of the old base constituency. For example, the new constituency of Ely and East Cambridgeshire has the old constituency of Cambridgeshire South East as its base. 58,080 electors from a total electorate of 87,032 in Cambridgeshire South East are transferred to Ely and East Cambridgeshire leaving 28,952 who are not. A total of a further 18,199 electors are acquired from the old Cambridgeshire North East and Cambridgeshire South constituencies to complete Ely and East Cambridgeshire's electorate of 76,279. The index of change for Ely and East Cambridgeshire is thus:

$$\frac{\text{Total deletions from base (28,952) + Total additions to base (18,199)}}{\text{Electorate of base constituency (87,032)}} \times 100 = 54.2$$

In cases where the relationship between a new constituency and its base is particularly tenuous, the index of change may exceed 100 – in Bristol North East, for example. The word ‘None’ alongside ‘Index of Change’ indicates that the new seat is the same as its base; a figure of 0.0 means that a very small number of electors have been moved from or into the base constituency.

Table 1 below shows the mean Index of Change for England, Scotland, Wales and Northern Ireland at this and previous boundary reviews. Unsurprisingly the large reduction of seats in Wales resulted in an increase in the amount of change in each constituency’s electorate, so that more half the electors in the average constituency were dispersed from or added to the ‘base’. In England, the strict application of the 5% rule contributed to an increase in the extent of change.

Table 1. Extent of change in constituency boundaries*

	England			Scotland			Wales			Northern Ireland		
	1995	2006	2023	1995	2003	2023	1995	2006	2023	1995	2006	2023
Mean % change	24.2	20.6	30.4	27.8	45.8	29.3	12.5	7.8	50.7	26.7	9.3	12.8
No change	128	55	65	9	3	11	27	18	1	1	6	0
<5% change	61	139	56	10	1	1	2	10	1	3	1	2
<10% change	43	89	68	6	1	5	2	8	2	0	5	4
<25% change	120	105	120	19	11	14	2	1	3	7	4	12
<50% change	82	70	104	14	20	14	2	1	8	4	2	-
50%+ change	95	75	130	14	23	12	5	2	17	3	0	-

*All figures refer to scores on the Index of Change

The partisan impact of the new constituencies

The voting figures for the new constituencies are our estimates of the notional 'results' in those constituencies if they had existed at the time of the 2019 general election -see section on 'How the figures are calculated'. They can tell us whether the boundary changes have had a significant impact both on the party political character of individual seats and on the pattern of results nationwide.

Our analysis suggests that the boundary changes have resulted in a modest benefit for the Conservatives and a very small loss for Labour. Broadly speaking this reflects a pattern where the East, South East and South West of England have gained seats reflecting the increase in electorates, and Wales has lost them following the implementation of the new rules. The overall impact is that the Conservatives will be defending a notional majority over all other parties of 94 at the next general election, compared with the 80 majority they actually achieved in 2019 -see Table 2². The Conservatives have made a net gain of seven seats from the new boundaries; Labour has a net loss of two seats. The Liberal Democrats lose three seats and Plaid Cymru drops from four seats to just two.

Table 2. House of Commons 'notional' (actual) composition 2019

	Notional	(Actual)	Difference
Conservative	372	(365)	+7
Labour (including Speaker)	201	(203)	-2
Liberal Democrat	8	(11)	-3
Plaid Cymru	2	(4)	-2
SNP	48	(48)	-
Northern Ireland	18	(18)	-
Green	1	(1)	-
Total seats	650	(650)	-
Seats for overall majority	326	(326)	-
Conservative overall majority	94	(80)	+14
Con majority over Labour	171	(162)	+9

The sources of each party's gains and losses of seats are set out in Table A and in the accompanying commentary. In a handful of cases boundary changes mean that a seat would have been won by a different party in 2019 even though its name remains unchanged. To help avoid confusion such cases are listed in full in Table 3.

Table 3. Different winning party/same constituency name

	Old boundaries	New boundaries
Leeds North West	Lab	Con
Warrington South	Con	Lab
Westmorland & Lonsdale	LD	Con
Caithness, Sutherland & Easter Ross	LD	SNP
Fife North East	LD	SNP

The modest gain in seats accruing to the Conservatives from the boundary changes is reflected in a similarly modest increase in the swing from Conservative to Labour required to bring about decisive changes in the composition of the House of Commons -see Table 4. Following the last general election, a direct swing of seven percentage points from Conservative to Labour was required for Labour to become the largest party in a hung parliament. The boundary revisions up this target for Labour to a swing of 8.3 percentage points. To gain an overall majority Labour needs a swing of 12.7%, up from 12.0% on the old boundaries. A more difficult task certainly, but perhaps more a matter of degree than of substance. The swing needed is still substantially more than the 10.2% Tony Blair achieved in 1997, and indeed more than double that at any other election since 1945. Any uniform swing from Conservative to Labour of greater than 4.2% and less than 12.7% at the next general election is likely to produce a hung parliament with no one party having an overall majority.

Table 4. Turnover of seats and swing required for decisive change in notional new House of Commons (old 2019 position)*

	Seats	Con to Lab % swing
Conservatives lose overall majority	-47 (-40)	+4.18 (+3.5)
Labour become largest party	+81 (+77)	+8.21 (+7.0)
Labour gain overall majority	+125 (+123)	+12.69 (+12.0)
Labour gain majority of 30+	+139 (+137)	+13.78 (+13.6)

*Speaker is counted as Labour.

A concentration on the direct swing between Labour and the Conservatives makes the implicit assumption that there will be no change in the share of votes cast for the Liberal Democrats and the Nationalist parties. In practice this is unlikely to be true, especially in the case of the Scottish National Party (SNP). For example, a 10% swing from the SNP to Labour in Scotland would yield that party 15 gains under the new boundaries and ease its path towards Downing Street.

How the figures are calculated - Replaying the 2019 general election

Much of the interest of the political parties, the media and others in the new constituency boundaries concerns their impact on the political map of the United Kingdom. However, whilst local wards are the basic building blocks for the construction of constituency boundaries, general election results are only counted and made available as whole constituency units. In other words, it is impossible to know precisely how particular parts of constituencies behave. Therefore, any attempt to gauge the electoral impact of moving wards, let alone parts of wards, between constituencies must employ surrogate data on the likely distribution of party support at that level.

Local government election results provide one ready source of information to use in such an exercise. They were employed by the teams which produced the previous 1983, 1995 and 2007 guides to the new parliamentary constituencies and have been adopted again here. The set of results used for each country is determined both by the start date of the Commissions' work and by the nature of the local electoral divisions used to build the new constituencies. For 'shire' England and the metropolitan areas we have used the 2019 local election results, supported by 'weighted' results for 2017, 2018, 2021 and 2022. The calculations for London are based on the 2018 and 2022 elections, for Wales on the 2017 elections, for Scotland on the 2017 and 2022 elections, and for Northern Ireland on the 2019 and 2023 local elections.³

It should further be noted that the Boundary Commissions' proposals are based on electorates in wards which existed or were in prospect in 2020. Subsequent local government boundary changes mean that a number of those wards are no longer extant. That is especially the case in Wales, and in three previously two-tier English counties - Cumbria, North Yorkshire and Somerset- which are now unitary authorities.

Our method for estimating the partisan consequences of boundary changes begins by building a matrix of local election results in the old constituency under review as if

each major party had contested every ward at the local elections. Two sorts of difficulty may be encountered in constructing such a matrix. First, there are many multi-member wards in local government allowing parties to field more than one candidate and electors to vote for more than one party. In order to standardise each party's vote in such cases we adopted an algorithm which takes account of how many of the vacant seats it and other parties contested before determining how the votes for its candidates are to be averaged⁴. In Scotland and Northern Ireland, where the Single Transferable Vote (STV) system is used in local elections, the first preference votes for each party are the primary focus.

A more serious problem is encountered in those cases where one or more of the major parties have no candidate in a ward. Where a party candidate is returned unopposed the first fall-back is to see whether full contests were held in previous years and to draw conclusions from those results. Failing that, the 'winning' party receives a vote equivalent to the share of the ward electorate it received in its best contested ward in that constituency. Those parties with no candidates in the ward receive a vote equivalent to the share of the ward electorate they received in their worst ward in that constituency. The latter solution is also employed where one party offers no candidate in a ward contested by the other major parties.

Candidates who are Independents or who stand on behalf of minor parties also require special consideration. In some areas of the country it is quite common for Independent candidates to be returned unopposed. In these cases the first option, again, is to look for contested elections in that ward in previous years. Where there no such examples we have made use of 2011 ward and output area level census data to examine the social characteristics of the ward and to draw conclusions from them about likely voting patterns. Where Independent or 'other' party candidates seem to have been given a free run by one of the major parties, their vote is given to that party as if they were its surrogate. Where Independents or 'other' party candidates stand in addition to candidates from all the major parties, their vote is ignored.

A further complication this time has been the extensive local government boundary changes. One consequence of these is that many newly drawn wards were split between two (or even more) existing constituencies. The Boundary Commissions try to avoid recommending constituencies in which wards are so divided, and therefore frequently proposed solutions whereby such 'split' wards were brought together again in a new constituency. There are also, though rarer, cases of current whole wards being split to enable the Commissions to propose constituencies that have appropriately sized electorates. Normally, and especially where only a few electors are involved, we have assumed that the electors who are moving are an electoral microcosm of the ward as a whole. In other cases, however, we again make use of census data to examine the social characteristics of the part of a ward being moved and to draw conclusions from them about likely voting patterns.

The application of these various rules and procedures allows the matrix of local election results to be completed. The votes for each party are then added to produce a local elections total for the constituency. We now identify those wards or parts of wards which are being removed from the old constituency. The local votes for each party in those wards and part wards are also summed. We then make the assumption that the proportion of a party's total local vote received in any given set of wards will

equal the proportion of its total general election vote in the same wards. In other words, its strongest and weakest wards will remain the same regardless of any gross differences in performance between the general and local elections. This enables us to translate local votes into notional general ones through a formula which takes account of the relationship between the two.

This notional vote, adjusted where necessary for the differences in turnout between local and general elections, is then subtracted from the actual party general election vote in the old constituency and awaits transfer to the appropriate new constituency. Such a method limits the scope for error by using calculated data only for those parts of constituencies being moved and avoids the need for the reconciliation of figures because whatever is subtracted and then later added sums to zero by definition.

One minor issue remains. The two parties which each fielded more than 100 candidates in 2019 (Brexit and the Greens) are listed separately in the notional results. In cases where Brexit/Green local election candidates can be identified, the notional vote for those two parties is calculated and transferred as above. Where there are no such candidates, the general election votes for these parties are transferred between constituencies in accordance with the proportion of the old constituency electorate moving to the new seat. A similar procedure applies to Independent and 'other' party candidates who received more than 2% of the constituency vote at the 2019 general election. Where however, and this also applies to Brexit and the Greens, a candidate receives less than 2% of the vote, all the votes received are retained in the new constituency which most resembles the old 'base'.

The relatively straightforward case of Rochdale provides an example of how this works. The old Rochdale seat is losing 8,204 electors to the new Heywood & Middleton North constituency with the transfer of the whole of the Spotland and Falinge ward. Local election results in 2019 for the existing Rochdale constituency are first added together using either real figures or, where candidates are missing, one of the measures outlined above. This produces 4,134 for the Conservatives; 13,378 for Labour; 4,495 for the Liberal Democrats; 2,141 for the Greens; and 3,892 for the Brexit party. The contribution to this figure of the ward going to Heywood & Middleton North must also be noted at this stage - Conservative 429; Labour 1,692; Liberal Democrat 196; Greens 426; and Brexit 419. The formula above can now be applied to estimate how the ward voted at the 2019 general election. Thus:

$$\frac{\text{Conservative local ward vote (429)}}{\text{Con local 'constituency' vote (4,134)}} \times \text{Con general election vote (14,807)} = 1,537$$

Doing a similar calculation for the other parties gives 3,096 Labour; 144 Liberal Democrat; 196 Green; and 416 Brexit notional general election votes to be transferred to Heywood & Middleton North.

The notional result in the new **Rochdale** is thus:

	2019 G.E. vote	- notional vote to Heywood etc.	=Notional result
Conservative	14,807	-1,537	=13,270
Labour	24,475	-3,096	=21,379
Liberal Democrat	3,312	-144	=3,168
Brexit	3,867	-416	=3,451
Green	986	-196	=790

This transfer of votes also provides an excellent, indirect example of an important caveat about all estimates of this kind. When deciding how to vote, electors take perhaps a growing account of the political situation in the constituency in which they are casting their ballots. **Rochdale** retains its status as a safe Labour seat. However, the transfer of mainly Labour votes to the new **Heywood & Middleton North** helps to create a marginal Labour seat whereas the current base Heywood and Middleton constituency was narrowly won by the Conservatives in 2019. It would seem reasonable, therefore, that some electors newly moving to Heywood & Middleton North from Rochdale may either vote differently or decide to cast a ballot where previously they had abstained thinking the outcome to be a foregone conclusion. **Our estimates can do no more than present an indication of the partisan impact of electors moving between constituencies based on how they voted in their old constituency at the 2019 general election.**

Table A. Change in allocation and party control of seats by region/country***England**

Regions

	Old total	Con	Lab	LD	Oth	New total	Con	Lab	LD	Oth
East of England	58	52	5	1	0	61 (+3)	55 (+3)	5	1	0
East Midlands	46	38	8	0	0	47 (+1)	39 (+1)	8	0	0
London	73	21	49	3	0	75 (+2)	20 (-1)	52 (+3)	3	0
North East	29	10	19	0	0	27 (-2)	8 (-2)	19	0	0
North West	75	32	42	1	0	73 (-2)	31 (-1)	42	0 (-1)	0
South East	84	74	8	1	1	91 (+7)	81 (+7)	8	1	1
South West	55	48	6	1	0	58 (+3)	50 (+2)	7 (+1)	1	0
West Midlands	59	44	15	0	0	57 (-2)	43 (-1)	14 (-1)	0	0
Yorkshire & The H.	54	26	28	0	0	54	27 (+1)	27 (-1)	0	0
England total	533	345	180	7	1	543(+10)	354(+9)	182(+2)	6(-1)	1

Wales

Old total	Con	Lab	LD	PC	Oth	New total	Con	Lab	LD	PC	Oth
40	14	22	-	4	-	32(-8)	12 (-2)	18 (-4)	-	2 (-2)	-

Scotland

Old total	Con	Lab	LD	SNP	Oth	New total	Con	Lab	LD	SNP	Oth
59	6	1	4	48	-	57(-2)	6	1	2 (-2)	48	-

Northern Ireland

Old total	All	DUP	SDLP	SF	UUP	New total	All	DUP	SDLP	SF	UUP
18	1	8	2	7	-	18	1	8	2	7	-

*In this and other Tables all figures for the old constituencies refer to the outcome of the 2019 general election. No account is taken of changes in party following by-elections etc.

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² All the figures in this section ignore any changes that have arisen from by-elections during the current parliament. In this table the Speaker has been included with the party for whom he was first elected (Labour).

³ Local election data for England, Scotland and Wales are compiled and published annually by Colin Rallings and Michael Thrasher in the various print and online editions of *Local Elections Handbook*. David Denver contributes the data for Scotland. See www.electionscentre.co.uk

⁴ See L. Ware, G. Borisyuk, C. Rallings and M. Thrasher, A New Algorithm for Estimating Turnout, *Electoral Studies*, 25,1 2006.