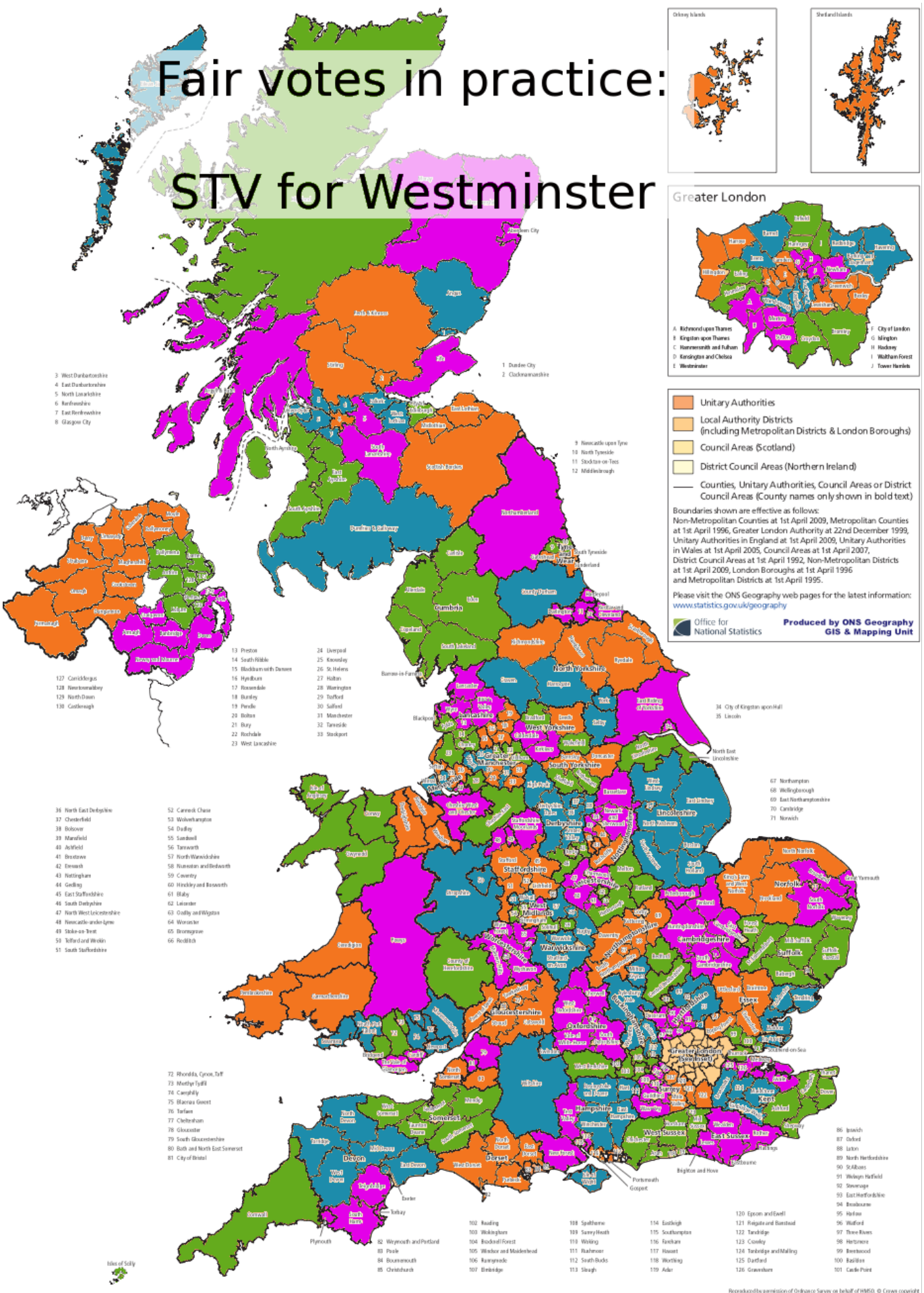
Fair votes in practice:

STV for Westminster



Council Areas in Scotland and District Council Areas in Northern Ireland are equivalent to Unitary Authorities in England and Wales, but are shown separately.

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Fair votes in practice: STV for Westminster

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The map overleaf illustrates how well proportional representation using the Single Transferable Vote (STV) could work for the UK Parliament.

Constituencies are based entirely on local authority areas, mostly electing 4 or 5 MPs; this gives a high level of proportionality, while maintaining a strong local connection. In England and Wales it is based as far as possible on traditional ("ceremonial") counties.

Such a scheme can combine the usual advantages of STV, including ...

- votes are cast for individuals not party lists;
- there are no safe seats, so every vote matters;
- the great majority of voters end up with at least one MP they voted for;
- the overall result is broadly proportional, at least among parties attracting around 15% support or more;
- minority parties and independents can get elected if they can attract a similar level of support locally;
- it is more difficult for extremist parties, because they tend not to be anyone's second preference

...with some additional advantages:

- the larger size of constituencies is compensated for by their being natural areas with which voters will find it easier to identify;
- boundaries would need to be changed only very rarely; population changes can instead be accommodated by changing the number of MPs for the constituency;
- the overall size of Parliament could be significantly reduced; the scheme shown on the map is based on a maximum of 100,000 electors per MP, to give a total of just over 500 MPs, about 20% fewer than in the present Parliament.

For more details see http://www.ma.hw.ac.uk/∼denis/stv4uk/

Fair votes in practice: STV for Westminster

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Introduction

A fairer voting system is one of the key steps needed to restore public faith in UK democracy. A new campaign, www.voteforachange.co.uk, is calling for a referendum. The Electoral Reform Society has for many years pressed for the introduction of the Single Transferable Vote (STV), and this has the support of the Liberal Democrats and many of the wider public. However, there does not seem to be any recent detailed scheme to show how STV might work in practice.

This paper describes how STV could work for the UK Parliament: showing that it is possible to introduce a much fairer and more inclusive voting system while retaining the principle that one votes for an individual, not a party list, and that representatives retain a strong local tie.

We first set out some simple rules that can be used to choose constituencies, then describe how that might work out in practice (as illustrated on the cover map). This is followed by estimates of the electoral effect of the scheme, using the votes of the 2005 General Election as an example.

We conclude with a discussion of what is important in the scheme and what inessential.

Rules

The proposed scheme is derived using the following rules:

1. Constituencies preferably elect either 4 or 5 MPs; where the other rules make this difficult, either 3 or 6 is allowed.

2. Constituencies are assigned one MP for every 100,000 electors or part thereof; thus a constituency with between 400,001 and 500,000 electors is assigned 5 MPs.

3. Constituencies are based on Local Authority areas. No unitary or district Local Authorities are split[1]; county and metropolitan authorities are divided if their electorate exceeds 600,000, in all cases respecting district boundaries within them.

4. *Exceptions to Rules 1 and 2*: in line with current practice, some allowance is made for sparsely-populated and isolated areas. Smaller numbers of MPs (generally 2 or 3, but in three cases[2] just 1) are allowed in sparsely populated areas; and the ceiling on the number of electors per MP is reduced to 90,000 for areas where the population density is less than 150/sq km, and 80,000 where it is less than 30/sq km.

While constituencies are inevitably larger than for single-member seats, this scheme is in other respects better in representing local identity. Because of the flexibility of allowing a variable number of MPs per constituency, it fits better with the pattern of Local Authorities. Further, constituency boundaries can remain constant over a long period. If for example, the electorate of a constituency with 5 MPs either falls below 400,001 or rises above 500,000, the number of MPs is simply adjusted down or up. The price paid for this flexibility is that the electorate per MP must be allowed to vary; but this variability (between 75,000 and 100,000 for a 4 or 5 member constituency) is less than the variability under the present system, as is illustrated in the Figures on the next page. Note also that this kind of adjustment can be made automatically each time the Electoral Register is updated; a Boundary Commission would only be required where a constituency's entitlement goes outwith the usual range of 3-6 MPs.[3]

[1] With one exception, Birmingham, which is divided in two because it has over 600,000 electors.

[2] The Western Isles, Northern Isles, and Argyll and Bute.

[3] In contrast, present Boundary Commissions take at least 5 years for each revision; the new boundaries to be used from the 2009/10 election onward are based on electoral data for 2000.

A map of constituencies

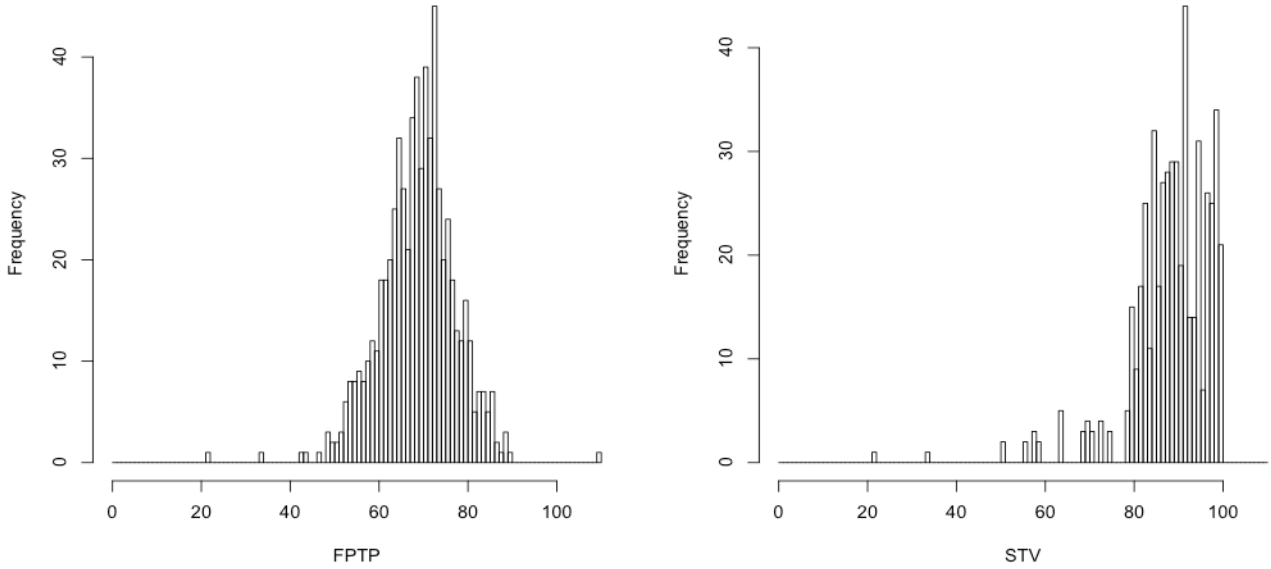
The map on the front cover shows the result of applying the above rules, using data on the electoral roll current in 2009. It gives a Parliament of 513 MPs, just over 20% fewer than at present[4], in 118 constituencies.

For England, roughly half the traditional (ceremonial) counties can be used as single constituencies. The larger counties and metropolitan areas are split into a number of constituencies, ranging up to 11 for Greater London, with each being a grouping of one or more district or unitary Local Authorities.[5]

For Wales, the eight ceremonial counties are each used as a single constituency, with number of MPs varying from 2 for the sparsely populated counties of Gwynedd and Powys up to 5 for Gwent. For Scotland, the 32 Councils are grouped into 16 constituencies. For Northern Ireland, the 11 Councils[6] are grouped into 3 constituencies.

The distribution of the number of MPs per constituency is

Number	1	2	3	4	5	6
Frequency	3	5	13	38	45	14



A comparison of the variability of electorate per MP for the present UK constituencies (FPTP) and the proposed scheme (STV). On a variety of standard statistical measures, the proposed scheme has significantly less variability.

[4]There are at present 646 MPs, to be increased to 650 at the next election.

[5]There are two exceptions: Teesside, which straddles the Durham/ North Yorkshire boundary, and Rutland, which is included with Leicestershire.

[6]These are the new Council areas to be used from 2011.

The 2005 General Election re-run

As an example, let's look at the most recent UK General Election, and estimate how it might have turned out using STV rather than the present "first past the post" (FPTP) system.

Assume for the moment that the votes cast in 2005 represented genuine first preferences, and that we can estimate second preferences using data from the Scottish local elections held under STV in 2007.

The following table shows how the percentages of seats for the main parties under STV would have been much closer to the voters' first preferences[7]:

Party	Con	Lab	LD	Nat	Other
Votes	33.2	36.2	22.6	2.2	5.7
MPs under STV	34.9	39.5	23.2	2.2	0.2
MPs (actual)	31.5	56.8	9.9	1.3	0.5

STV gives a result very close to proportionality, certainly far closer than the present system, which gave one party a large overall majority on only 36.2% of the votes (indeed, Labour won 25% more seats than the Conservatives, despite having only 3% more votes). The main difference from proportionality under STV is that minorities and independents with less than 10% of the vote get very few MPs (as they do of course under the present system). The Nationalist parties get their fair share of seats (2.2%), because their vote is concentrated locally.

In practice, minority parties and independents can be expected to win more seats, because voters can express their real preferences under STV without fear of their vote being wasted. It is relatively easier for moderate parties to win seats than for extremists, because the latter are unlikely to attract the transfers of second preferences they need to build the vote required to win a seat (16.7% in a 5-member constituency).

If we look at the breakdown of MPs in each constituency, we find that there are no safe seats: there are no single-party seats (except for the three special single MP cases). Indeed, the great majority of constituencies have representatives of all 3 main parties; and 91% of voters end up with an MP of their first preference party, compared with only 48% under the present system.

[7]Northern Ireland is excluded; the estimated result there is also very close to proportional, among the main Northern Irish parties.