Single Transferable Vote (STV)

Combining Preference Voting, Proportionality and Local Representation
Objectives

- to demonstrate how Single Transferable Vote works
- to illustrate how proportionality can be achieved under this system
Key features

- proportional system where voters vote preferentially for candidates
- candidate based not party based
- surplus votes are transferred to other candidates
Inherent tension in Single Transferable Vote (STV)

- local representation best achieved with smaller geographic districts
- proportionality best achieved with larger geographic districts
Where is STV used?

- Ireland and Malta
- Australia at the national Senate and state upper house (state Senate)
- in lower house elections in Tasmania Australian Capital Territory
Elements of STV

district magnitude is always greater than one (i.e., multi-member districts)

ballot structure is ordinal (i.e., ranking of candidates)

formula is proportional -- DM must be large to achieve proportionality at district level
District magnitude is always greater than one to achieve proportionality solely through candidate-based elections at the district level, DM must be greater than one.
### Ballot structure:
#### ranking
#### local candidates

<table>
<thead>
<tr>
<th>Party</th>
<th>Candidate Name</th>
<th>Address</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AHERN - FFÁIL</strong> (BERTIE AHERN) of St. Lukes, 161 Lower Drumcondra Road Dublin 9; (Taoiseach)</td>
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<td><strong>FITZPATRICK - FFÁIL</strong> (DR. DERmot FITZPATRICK) of 80 Navan Road, Dublin 7; (Medical Doctor and Public Representative)</td>
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<td><strong>GREGORY - NON PARTY</strong> (TONY GREGORY) of 5 Sackville Gardens; Ballybough, Dublin 3; (Full-Time Public Representative)</td>
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<td><strong>KEHOE - SÍNn FÉIN</strong> (NICKY KEHoe) of 30 Fanum Road Cabra, Dublin 7; (Bricklayer)</td>
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<td><strong>MITCHELL - FINE GAEL</strong> (JIM MITCHELL) of Leinster House, Dublin 2; (Full-Time Public Representative)</td>
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<tr>
<td><strong>O’DONNELL - NON PARTY</strong> (PATRICK NOEL O’DONNELL) of 14 Cliftonville Road, Glasnevin, Dublin 9; (Businessman)</td>
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<tr>
<td><strong>O’LOUGHLIN - COMHAR CRIOISTÁI - CHRISTIAN-SOLIDARITY PARTY</strong> (PAUL THOMAS O’LOUGHLIN) of Flat 4 255 North Circular Road Phibsborough Dublin 7; (Shop Assistant)</td>
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<tr>
<td><strong>PRENDIVELLE - NON PARTY</strong> (TOM PRENDIVELLE) of 52 Goldenhill Street, Phibsborough, Dublin 7; (News Reporter)</td>
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<tr>
<td><strong>SIMPSON - GREEN PARTY - COMHAONTAS GLAS</strong> (TOM SIMPSON) of 3 Hampstead Avenue, Glasnevin, Dublin 9; (FAS Instructor)</td>
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**INSTRUCTIONS**

1. See that the official mark is on the paper.
2. Write 1 beside the name of the candidate of your first choice, 2 beside your second choice, and so on.
3. Fold the paper to conceal your vote. Show the back of the paper to the presiding officer and put it in the ballot box.
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Ballot structure:
ranking local candidates

- voters rank candidates so that preferences are accounted for
- ballot structure is ordinal
Ballot Structure: ranking local candidates

- in Ireland & Malta, voters rank as many or few candidates as they wish
  - greater choice but ballot becomes “exhausted” earlier
- in Australian elections, voters must rank all candidates or a minimum
  - ‘compulsory choice’ but ensures that ballots are not “exhausted”
STV formula is proportional

• quota formula is the minimum vote that ensures all seats will be filled
• votes divided by seats +1, then add 1

quota = [votes/seats+1] +1
• Anyone who reaches quota is elected.

• If all seats are not filled, how do other candidates get to the quota?

• Votes are transferred from other candidates until all seats are filled.
Which votes are transferred?

- those votes not initially used to elect a candidate:
  - surplus votes (votes above the quota)
  - transfers from eliminated candidates
Counting procedures under STV

1. transfer surplus votes

votes above the quota (surplus votes) are transferred to other candidates
How to transfer surplus ballots?

- transfer ‘last parcel’ of ballots
- transfer random selection of ballots
- transfer all ballots at a discounted value
Counting procedures under STV

2. transfer last placed candidate

- the votes of the eliminated candidates are transferred by counting the next choice on those ballots
- this process of transferring votes continues until all seats are filled
Summary of the counting procedures under STV

- Winners’ surplus votes are transferred.
- Lowest candidates’ votes are transferred.
Effects of STV

- greater voter choice
  - among candidates of different parties
  - among candidates within the same party
- local representation
- proportionality if DM is large
Effects of STV

- creates intra-party competition because members of the same party compete against each other
- more independent candidates
- Ireland Malta have small number of parliamentary parties
- may be a result of STV or political culture
Relating STV to principles

- **Legitimacy**
  - seeks to achieve proportionality while maintaining local, candidate-centred elections
- **But**
  - achieving both proportionality and local representation may be difficult
Relating STV to principles

• fairness of representation
  can achieve proportionality (with large DM)
• but
  does not have list mechanism which may encourage demographic representation
Relating STV to principles

- voter choice
  offers choice of candidates *among* and *between* parties
Relating STV to principles

- effective parties
  - small parties and independents can obtain seats
- but
  - large parties tend to dominate in STV systems
Elections in the Republic of Ireland
percentage of seats won

- Fianna Fail
- Fine Gael

Elections in the Republic of Ireland
percentage of seats won

- Fianna Fail
- Fine Gael
- Labour
- Others

Elections in Malta
number of seats won

0  7 14 21 28 35

- Nationalist
- Labour
New South Wales Senate
(DM = 21)

- In 2003, Labour and Liberal received 71% of seats
- 4 other parties were elected (including the Shooters Party)
In 1999, Labour and Liberal received 57% of seats (8 and 4 seats)

1 other party received two seats

7 other parties received one seat (including the Outdoor Recreation Party)
Relating STV to principles

- stable and effective government
- a small number of large parties contributes to stable government
Relating STV to principles

- **accountability**
  - local representation ensures connection between voters and representatives
- **but**
  - multi-member districts can dilute local representation
Relating STV to principles

• simplicity and practicality
  • complex voting if compelled to vote for all candidates
  • complex counting procedure
• but
  • voters have adapted to it in some democracies
Conclusion

- seeks to achieve proportionality using only local, candidate-centred election
- encourages electoral competition within a party
- allows for voter choice by ordinal ranking
Citizens’ Assembly on Electoral Reform
L’Assemblée des citoyens sur la réforme électorale