



Making Every Vote Count

FairVote Minnesota's Vision for better democracy

- **Broaden representation**
- **Strengthen accountability**
- **Deepen discourse**
- **Increase participation**

Representative Democracy

A legislature...

“...should be an exact portrait, in miniature, of the people at large, as it should think, feel, reason, and act like them.”

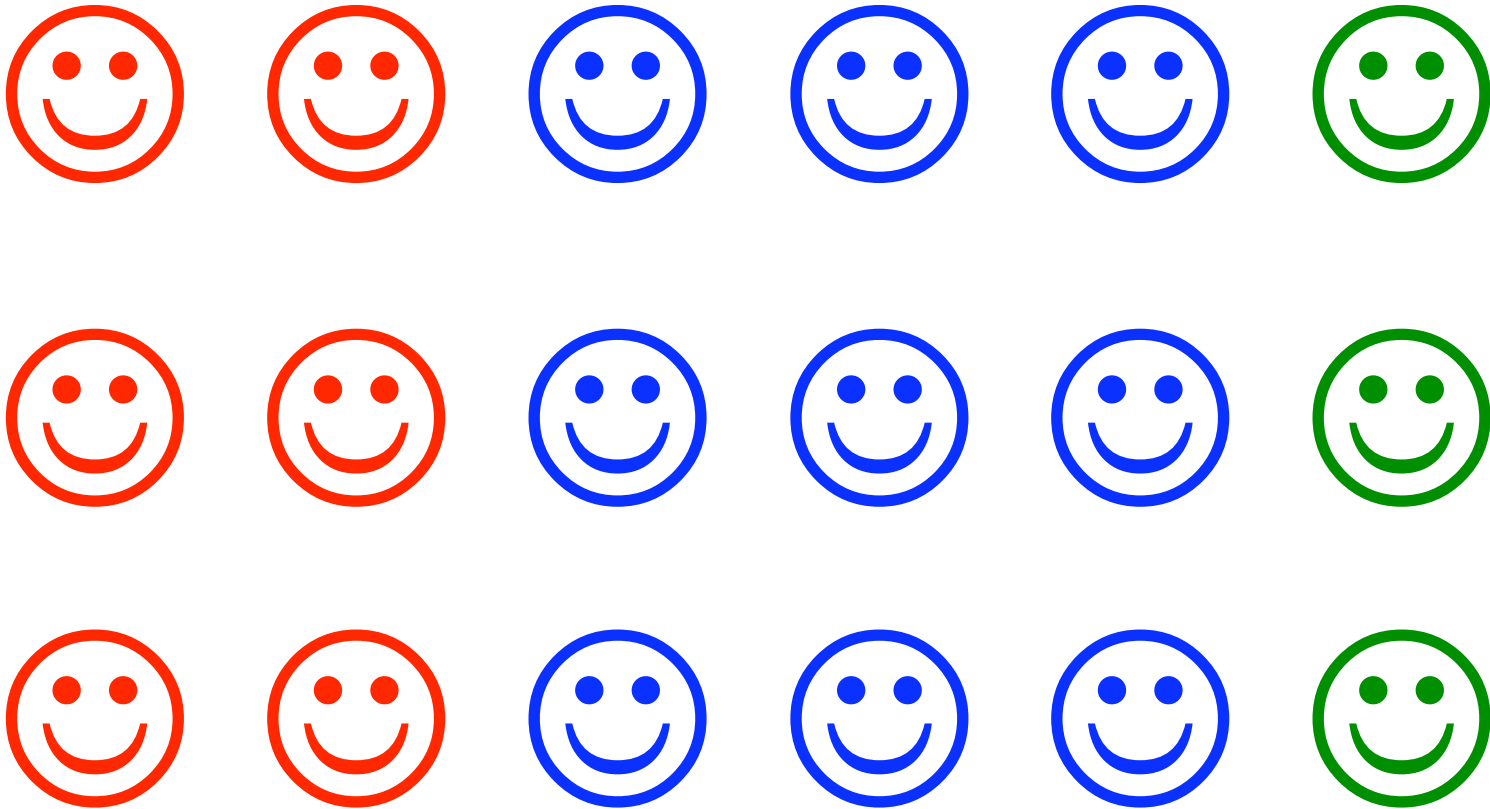
-- John Adams

New England Town Meeting

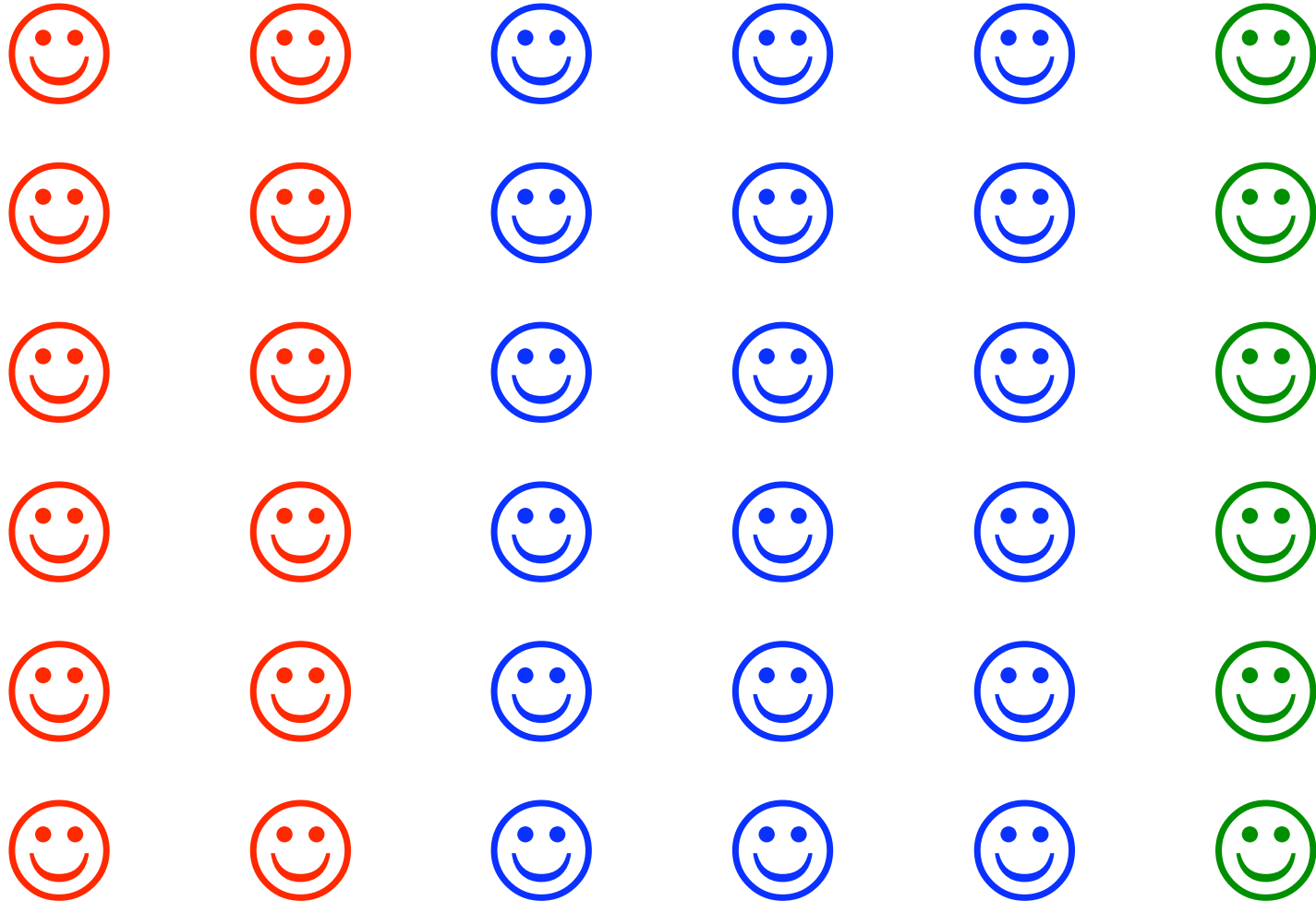
The citizens *are* the legislature – perfectly representative



How big is too big?

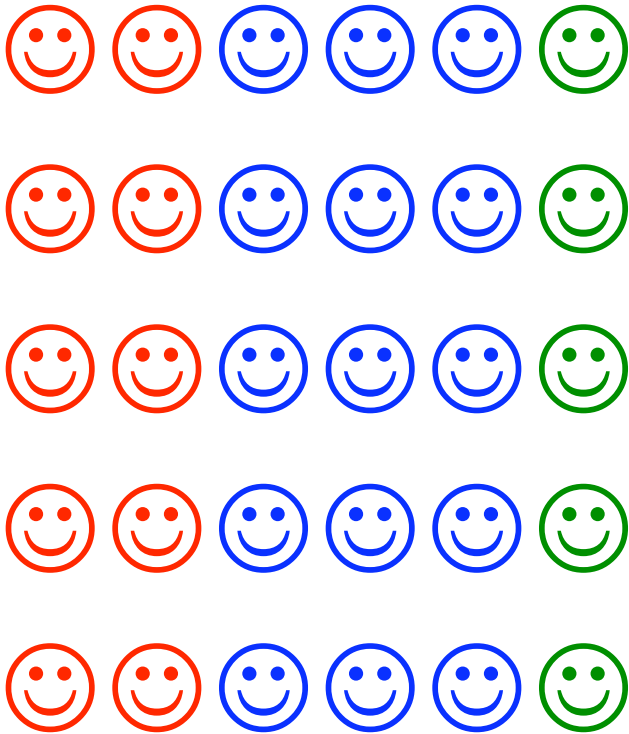


How big is too big?

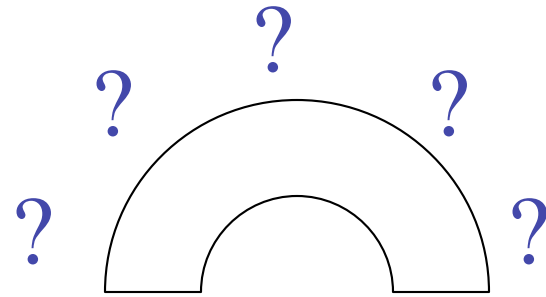


Your city

The voters



The city council



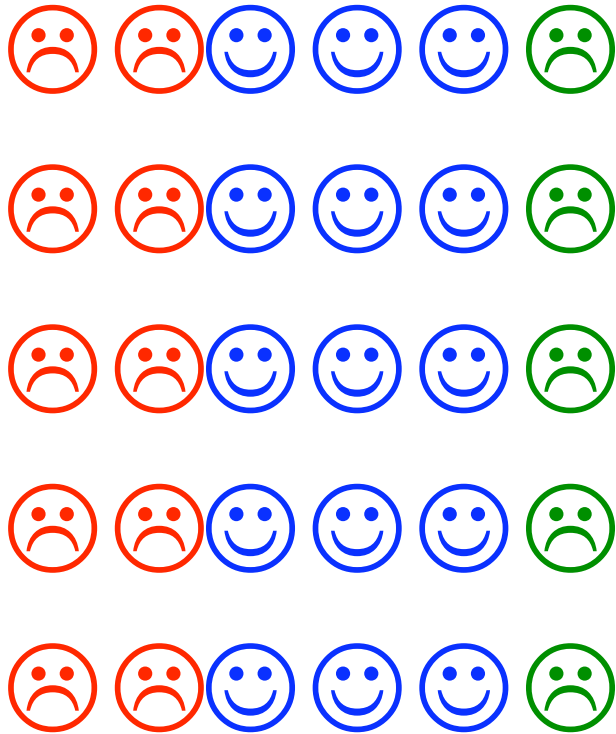
At-large ballot

Vote for up to five candidates.

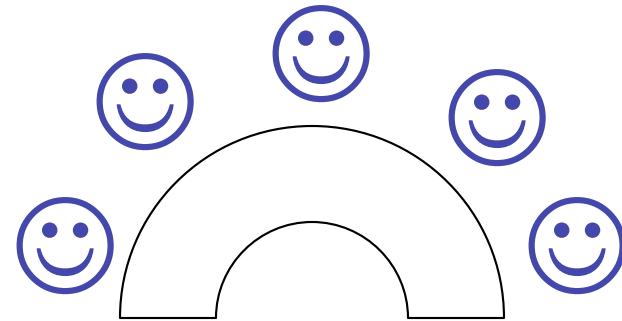
Candidate A	<input type="radio"/>
Candidate B	<input type="radio"/>
Candidate C	<input type="radio"/>
Candidate D	<input type="radio"/>
Candidate E	<input type="radio"/>
Candidate F	<input type="radio"/>
Candidate G	<input type="radio"/>
Candidate H	<input type="radio"/>
Candidate I	<input type="radio"/>
Candidate J	<input type="radio"/>

At-Large Council

The voters



The city council



The Problem: First Past The Post

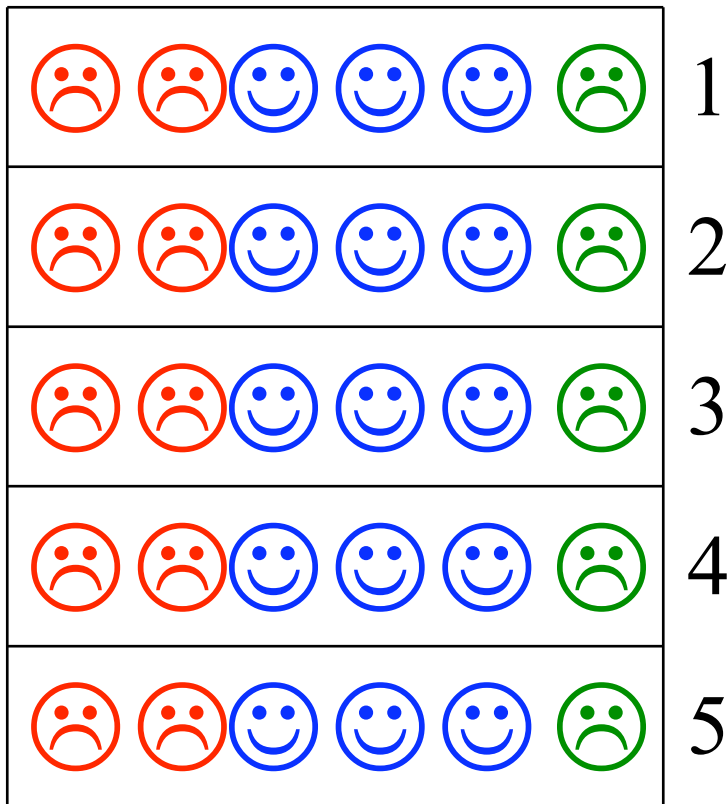
- Only the largest group wins representation**
- Most legislative seats are noncompetitive**
- High stakes lead to desperate campaign tactics**
- Negative campaigns and targeting swing voters cheapens discourse, dumbs down debate**
- Poor democracy means low voter turnout**

From At-Large to Wards

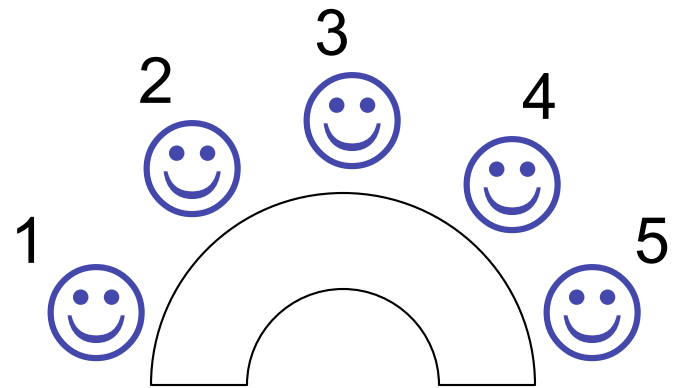
- Assures geographical diversity, but still only allows largest group to win representation**
- Even less competition, meaning diminished accountability**

Council with Wards

The voters



The city council



Two-round elections

- Longer campaigns with greater cost for campaigns and election administration**
- Greater opportunity for negative campaigning in second election**
- Reducing large field to two candidates in one step may be too abrupt**
- Reduced participation in choosing the winners**

Voting Methods: What Are They?

Plurality/ Majority	Limited Voting	Cumulative Voting	Preference Voting	Party List
United Kingdom	Local govt in CT, PA, AL	Local govt in AL, TX, IL, SD	Australia Ireland Cambridge, MA London New Zealand cities San Fran, CA In 1st half of 20th century, two dozen US cities	Most major and emerging democracies in Europe, Latin America, South Africa
France				
United States				
Canada				

◀Least Proportional Scale of Proportionality Most Proportional▶

Voting Methods: What Are They?

Plurality/ Majority	Limited Voting	Cumulative Voting	Preference Voting	Party List
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France				
United States				
Canada				

◀Least Proportional Scale of Proportionality Most Proportional▶

Limited Voting

- Individual candidates are nominated
- Voters vote for fewer candidates than will be elected
- Candidates with most votes win
- May result in proportional representation of voters, but not reliably

Limited Voting

Three to be elected. Vote for only one.

Candidate A	<input type="radio"/>
Candidate B	<input type="radio"/>
Candidate C	<input type="radio"/>
Candidate D	<input type="radio"/>
Candidate E	<input type="radio"/>
Candidate F	<input type="radio"/>

Cumulative Voting

- Individual candidates are nominated
- Each voter has the same number of votes as the number of seats to be elected
- Voters may allocate their votes one per candidate or they may “plump” them on fewer candidates
- Candidates with most votes win
- May result in proportional representation of voters, but not reliably

Cumulative Voting

Three to be elected.

Allocate 3 votes among 1, 2, or 3 candidates.

Candidate A	<input type="radio"/>
Candidate B	<input type="radio"/>
Candidate C	<input type="radio"/>
Candidate D	<input type="radio"/>
Candidate E	<input type="radio"/>
Candidate F	<input type="radio"/>

Party List

- Slates of candidates are nominated in ranked order
- Voters vote for the entire slate
- Candidates on a slate are seated in proportion to the share of vote cast for that slate

10% of voters elect 10% of seats

40% of voters elect 40% of seats

Party List

Vote for one slate of candidates

Candidate Slate A	<input type="radio"/>
Candidate Slate B	<input type="radio"/>
Candidate Slate C	<input type="radio"/>
Candidate Slate D	<input type="radio"/>
Candidate Slate E	<input type="radio"/>

Preference (or “Choice”) Voting

- **Candidates run city-wide or from multi-winner wards**
- **Instead of voting for a single candidate or a group of candidates, voters vote for a list of candidates ranked in order of preference**

Preference (or “Choice”) Voting

Rank candidates in order of preference

	1st choice	2nd choice	3rd choice	4th choice
Candidate A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate D	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate E	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate F	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate G	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate H	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Preference Voting: Who wins?

- **The more voters who agree with you, the more candidates on your list you help elect.**
- **20% of the voters elect 20% of the seats**
- **60% of the voters elect 60% of the seats**

Preference Voting Threshold to Win

$$\frac{1}{\text{Seats} + 1} + 1 = \text{share of votes needed to win}$$

If number of
seats is:

Share of votes
needed to win
is:

1

$1/2 + 1$

2

$1/3 + 1$

3

$1/4 + 1$

4

$1/5 + 1$

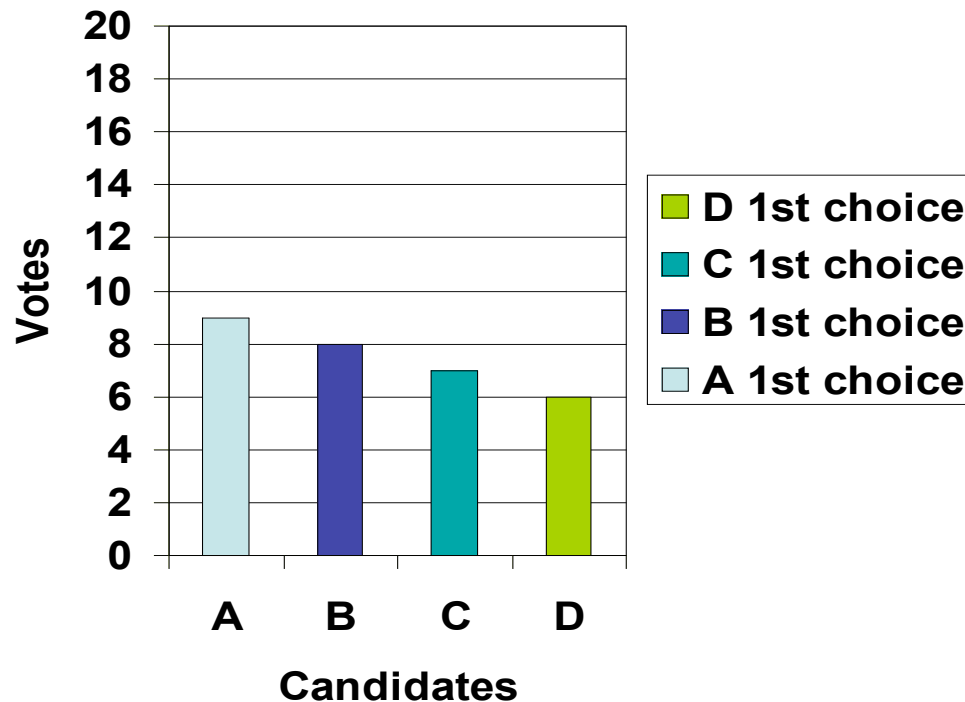
Example: Elect a mayor

$$\frac{30 \text{ voters}}{1 \text{ seat} + 1} + 1 = 16 \text{ votes needed to win}$$

Candidate	1 st choices	1 st transfer	New total	2 nd transfer	New total
A	9				
B	8				
C	7				
D	6				

Example: Elect a mayor

$$\frac{30 \text{ voters}}{1 \text{ seat} + 1} + 1 = 16 \text{ votes needed to win}$$



Example: Elect a mayor

	1st	2nd	3rd	4th
A	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1st	2nd	3rd	4th
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C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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C	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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C	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

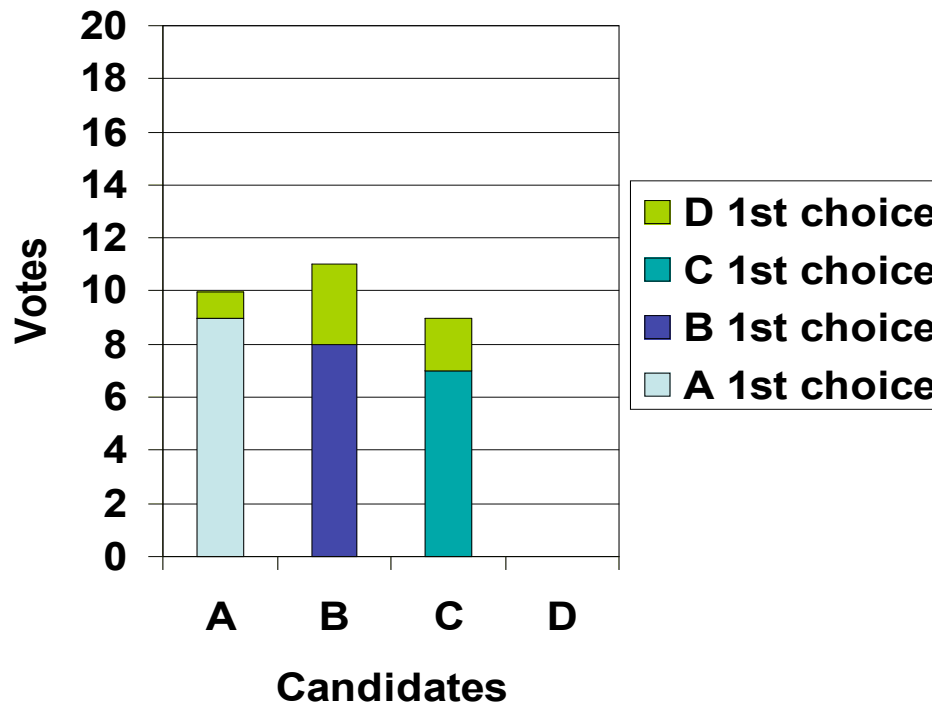
Example: Elect a mayor

$$\frac{30 \text{ voters}}{1 \text{ seat} + 1} + 1 = 16 \text{ votes needed to win}$$

Candidate	1 st choices	1 st transfer	New total	2 nd transfer	New total
A	9	+1	10		
B	8	+3	11		
C	7	+2	9		
D	6	-6			

Example: Elect a mayor

$$\frac{30 \text{ voters}}{1 \text{ seat} + 1} + 1 = 16 \text{ votes needed to win}$$



Example: Elect a mayor

	1st	2nd	3rd	4th
A	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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	1st	2nd	3rd	4th
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C	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
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C	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1st	2nd	3rd	4th
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C	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1st	2nd	3rd	4th
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B	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
C	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Example: Elect a mayor

	1st	2nd	3rd	4th
A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
C	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	1st	2nd	3rd	4th
A	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
B	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
D	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

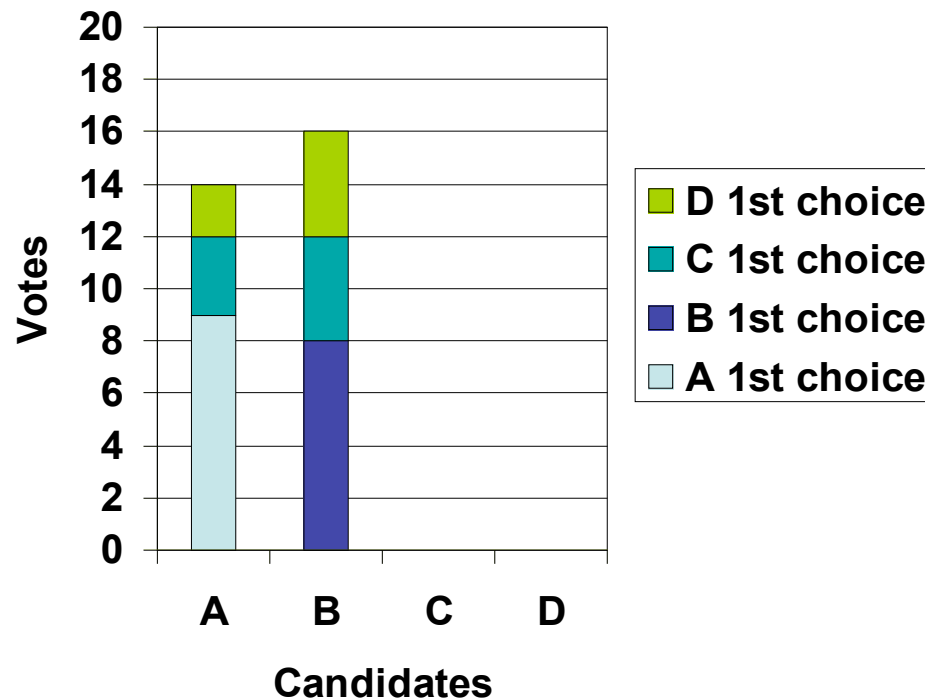
Example: Elect a mayor

$$\frac{30 \text{ voters}}{1 \text{ seat} + 1} + 1 = 16 \text{ votes needed to win}$$

Candidate	1 st choices	1 st transfer	New total	2 nd transfer	New total
A	9	+1	10	+4	14
B	8	+3	11	+5	16
C	7	+2	9	-9	
D	6	-6			

Example: Elect a mayor

$$\frac{30 \text{ voters}}{1 \text{ seat} + 1} + 1 = 16 \text{ votes needed to win}$$



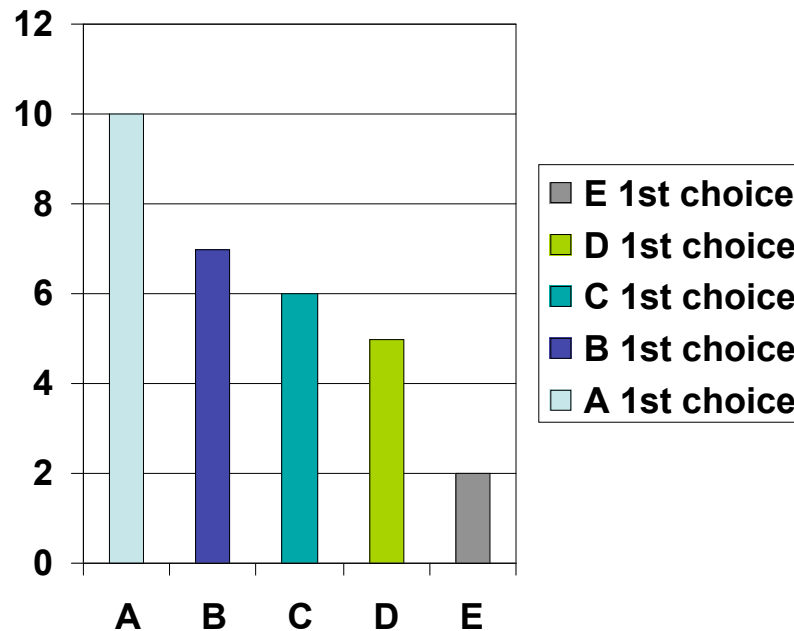
Example: Elect 3 councilors

$$\frac{30 \text{ voters}}{3 \text{ seats} + 1} + 1 = 8 \text{ votes needed to win}$$

Candidate	1 st choices	1 st transfer	New total	2 nd transfer	New total
A	10				
B	7				
C	6				
D	5				
E	2				

Example: Elect 3 councilors

$$\frac{30 \text{ voters}}{3 \text{ seats} + 1} + 1 = 8 \text{ votes needed to win}$$



Spend a dollar at the convenience store

	Cost	Balance Remaining
		<u>\$1.00</u>
Candy bar	-.80	.20
Breath mints	-.20	0.00

Example: Elect 3 councilors

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	●	○	○
C	○	○	○	○
D	○	○	○	○
E	○	○	○	○

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	●	○	○
C	○	○	○	○
D	○	○	○	○
E	○	○	○	○

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	●	○	○
C	○	○	○	○
D	○	○	○	○
E	○	○	○	○

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	●	○	○
C	○	○	○	○
D	○	○	○	○
E	○	○	○	○

$5 \times 2/10 = 1$ vote to B

$3 \times 2/10 = .6$ vote to D

$2 \times 2/10 = .4$ vote to E

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	●	○	○
E	○	○	○	○

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	●	○	○
E	○	○	○	○

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	○	○	○
E	○	●	○	○

	1 st	2 nd	3 rd	4 th
A	●	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	○	○	○
E	○	●	○	○

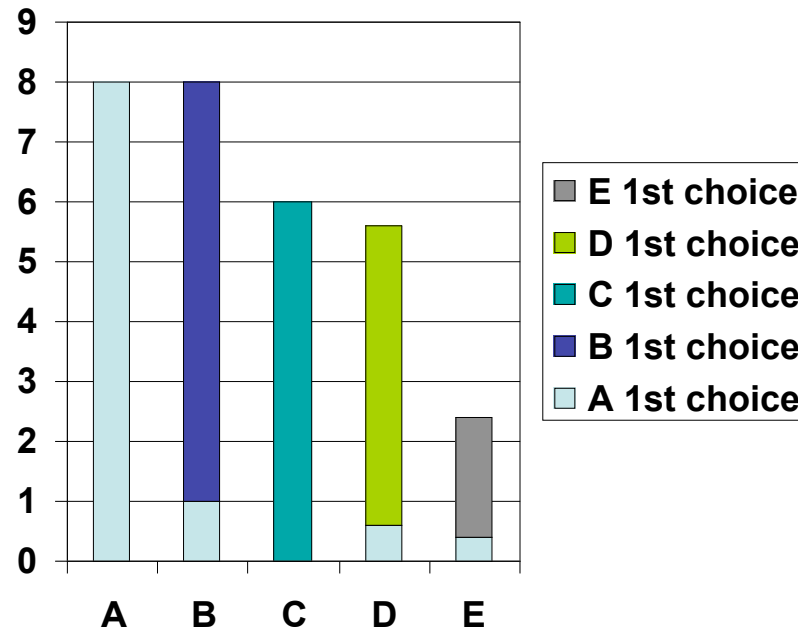
Example: Elect 3 councilors

$$\frac{30 \text{ voters}}{3 \text{ seats} + 1} + 1 = 8 \text{ votes needed to win}$$

Candidate	1 st choices	1 st transfer	New total	2 nd transfer	New total
A	10	-2	8		
B	7	+1	8		
C	6		6		
D	5	+.6	5.6		
E	2	+.4	2.4		

Example: Elect 3 councilors

$$\frac{30 \text{ voters}}{3 \text{ seats} + 1} + 1 = 8 \text{ votes needed to win}$$



Example: Elect 3 councilors

	1 ^s t	2 ⁿ d	3 ^r d	4 ^t h
A	●	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	○	●	○
E	○	●	○	○

	1 ^s t	2 ⁿ d	3 ^r d	4 ^t h
A	●	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	○	●	○
E	○	●	○	○

$$2 \times 2/10 = .4$$

$$2 \times 1 = 2$$

Total = 2.4 votes for D

	1 ^s t	2 ⁿ d	3 ^r d	4 ^t h
A	○	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	●	○	○
E	●	○	○	○

	1 ^s t	2 ⁿ d	3 ^r d	4 ^t h
A	○	○	○	○
B	○	○	○	○
C	○	○	○	○
D	○	●	○	○
E	●	○	○	○

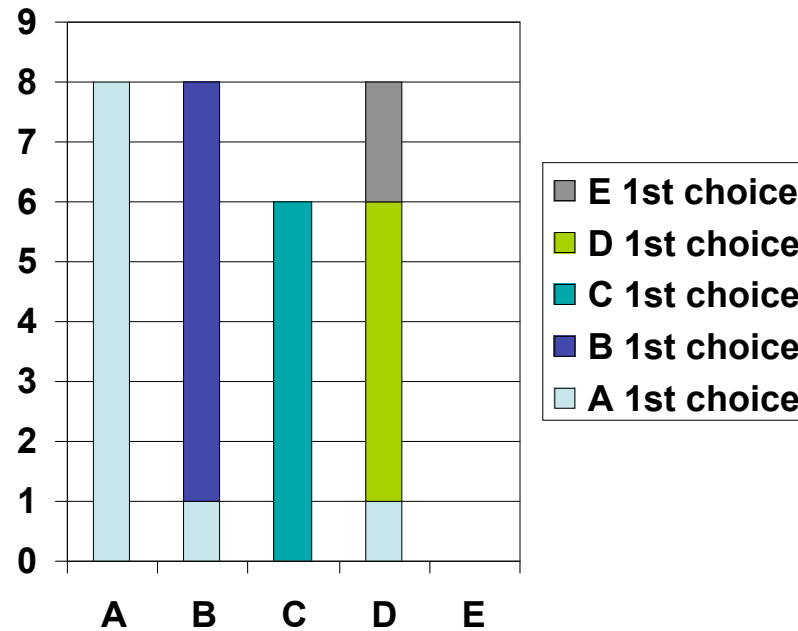
Example: Elect 3 councilors

$$\frac{30 \text{ voters}}{3 \text{ seats} + 1} + 1 = 8 \text{ votes needed to win}$$

Candidate	1 st choices	1 st transfer	New total	2 nd transfer	New total
A	10	-2	8		8
B	7	+1	8		8
C	6		6		6
D	5	+0.6	5.6	+2.4	8
E	2	+0.4	2.4	-2.4	0

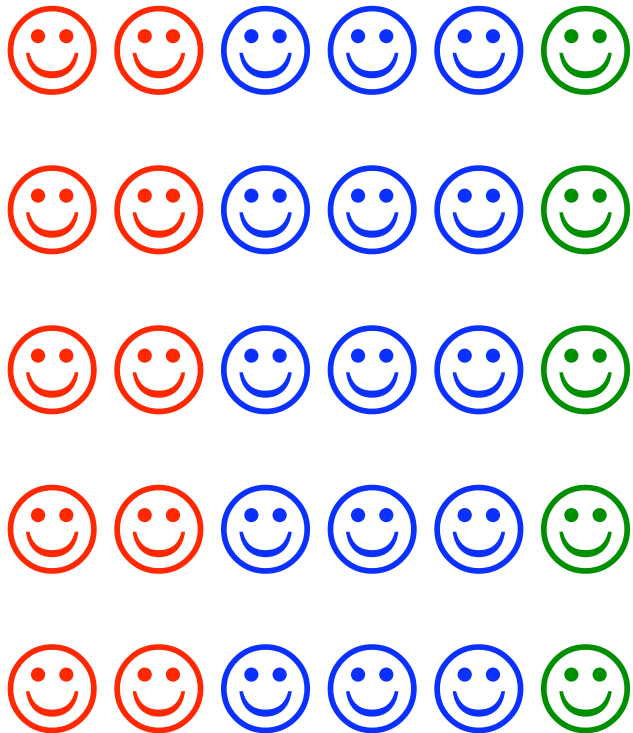
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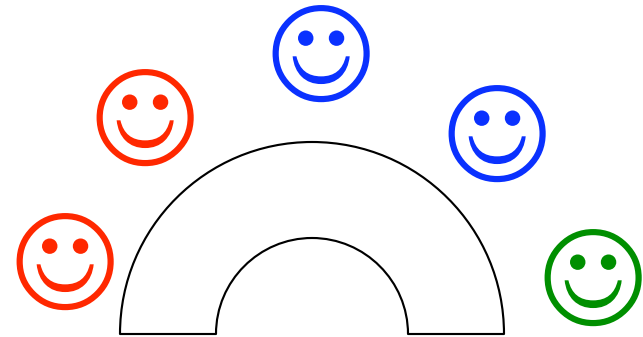


Preference Voting

The voters



The city council



Preference (or “Choice”) Voting

- **Allows as many voters as possible to win representation**
- **Is more competitive, strengthening accountability**
- **Provides for more substantive discussion of issues**
- **Eliminates need for two elections and gives each vote greater effect, increasing participation**

Preference (or “Choice”) Voting

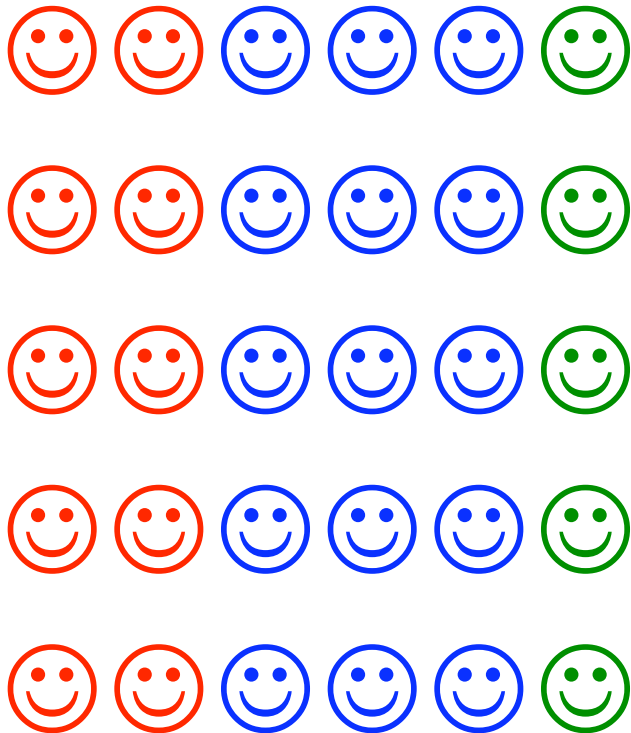
- **Broadens representation**
- **Strengthens accountability**
- **Deepens discourse**
- **Increases participation**

We can have Preference Voting too

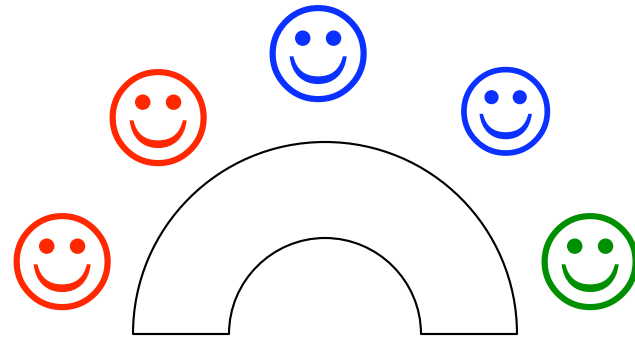
- **Educate others**
- **Start using Preference Voting in non-governmental organizations**
- **Recruit support from organizations and leading opinion makers**
- **Start a city charter amendment campaign to use Preference Voting in municipal elections**

Fair representation = happy voters

The voters



The city council





- **Education**
- **Public Policy**
- **Election Services**

www.FairVoteMN.org