# Multi-Winner Elections: 

Working Toward<br>Proportional Representation



## Multi-Winner Elections

## Deserve More Attention

Look for opportunities to hold multi-winner elections

- Eliminate gerrymandering
- Increase competitiveness IVoted
- Use a voting method that promotes proportional
 representation


## Definitions

# Single-Winner Election: governor, ward member, member of Congress 

Versus

## Multi-Winner Election: 2 or more

 seats filled in one contest
## Example: 2019 Denver

## Single Winner

Clerk and Recorder
Vote for one (1)

- Peg Perl
- Paul D. Lopez
- Sarah O. McCarthy


## Two Winners

## Councilmembers At-Large

Vote for not more than two (2)

- Jesse Lashawn Parris
- Johnny Hayes
- Deborah "Debbie" Ortega
- Tony Pigford
- Lynne Langdon
- Robin Kniech


## Appropriate Use

## Single-Winner Contests

Appropriate for unitary executive offices, such as governor, treasurer, and mayor

## Multi-Winner Contests

Appropriate for multi-member legislative or executive bodies, such as the US House of Representatives, city council, and school boards


## Multi-Winner Elections

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- Eliminate gerrymandering


Increase competitiveness
Use a voting method that promotes PR

## Conditions for Gerrymandering

- Elected multi-member body
- Elections by geographic district where different district boundaries are possible.



## Solve Gerrymandering!

Gerrymandering is manipulating the boundaries of an electoral district.

To eliminate gerrymandering, get rid of districts!


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To eliminate gerrymandering, get rid of districts!
Eliminating all districts may be unreasonable; California has 53 congressional districts.

$\star$ Solution: Create multi-member districts (and conduct multi-winner elections). $\star$

## Fair Representation Act

- HR 4000 - Create multi-member congressional districts, usually 3 to 5 members/district
- Overturn a 1967 law mandating single-member districts


## 9 Gerrymandered

## Congressional Districts



## Congressional Districts Under FRA



## Local Gerrymandering

Blatant gerrymandering less likely but still possible at the local level


Solutions - same as for federal/state

- One at-large district
- Multi-member wards with multiwinner elections
Easier to make changes locally


# Multi-Winner Elections Deserve More Attention Look for opportunities to hold multi-winner elections 

- Eliminate gerrymandering
- Increase competitiveness IVoted


## Got Competitive Elections?

Multi-Member District: 2 or more members elected from one district Multi-Winner (MW) Election: 2 or more seats filled in one contest

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Multi-Member District: 2 or more members elected from one district Multi-Winner (MW) Election: 2 or more seats filled in one contest

Multi-member districts do not always hold multi-winner elections!

# Every State is a <br> "Multi-Member" District 

## Each state elects 2 US senators in staggered years.

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Each state elects 2 US senators in staggered years.

US Senate elections are not MW and most are not competitive.

## Competitiveness Problems in SW Districts

Problem \#1 - Many district elections are uncontested, especially in one-party communities. Voters have no voice.

## Competitiveness Problems in SW Districts

Problem \#1 - Many district elections are uncontested, especially in one-party communities. Voters have no voice. Problem \#2 - Two good candidates vie for one district seat. Only one of the good candidates can win.

# MW Elections Increase Competitiveness 

\#1 Solved - Larger MW districts have a bigger pool of candidates. A candidate doesn't win because of geography.

## MW Elections Increase Competitiveness

\#1 Solved - Larger MW districts have a bigger pool of candidates. A candidate doesn't win because of geography.
\#2 Solved - Two popular candidates from the same neighborhood can run "against" each other and both win.

# Competitive Elections $\rightarrow$ Higher Voter Turnout 

-If something is at stake in an election...

- If voters feel like their voice matters...
-- Voters Turn Out!
I Voted


# Multi-Winner Elections Deserve More Attention <br> Look for opportunities to hold multi-winner elections 

- Eliminate gerrymandering
- Increase competitiveness
- Use a voting method that promotes proportional representation (PR)


# Multi-Winner Elections Deserve More Attention 

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Denver, Dec 7, 2019

# Multi-Winner: PR or Not PR? 



# What is Proportional Representation? 

Proportional representation (PR) is a feature of some voting methods in which one* or more characteristics of an electorate are reflected proportionately in the elected body.

Not a winner-take-all method!
*If only one, it's usually political party affiliation.

## Non-Partisan PR

Non-partisan PR elections allow the voters to choose

## the characteristics which matter most to them and/or which are the important issues of the campaign:

rural, renters, religion, youth, gender, racial/ethnic, positions on issues (fracking, guns), or, yes, political ideology or geography

# Multi-Winner Elections 

Promote PR
Do Not Promote PR

Mixed-Member PR*^
(New Zealand since ‘96)
Party List PR* (variations)
*Proportional by political party
^Includes some SW contests

# UK Parliament Debate 2017 Oct 30 



# Multi-Winner Elections 

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Block Plurality Voting
(Denver, CO example)

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## Block Plurality Election

5-winner election with 100 voters
Vote for up to 5 candidates
10 candidates: Alphas (A1, A2, A3, A4, A5) Betas (B1, B2, B3, B4, B5)

- $60 \%$ of electorate supports a straight Alpha slate
- $40 \%$ of electorate supports a straight Beta slate

Each Alpha candidate gets 60 votes and is elected.
Alphas win 100\% of the seats.
Not Proportional

## Proportional Election

5-winner election with 100 voters.
How to vote varies according to chosen PR voting method.
10 candidates: Alphas (A1, A2, A3, A4, A5) Betas (B1, B2, B3, B4, B5)

- 60\% of electorate supports only Alphas
- $40 \%$ of electorate supports only Betas

A proportional result is
3 Alpha candidates (60\% of the winners)
2 Beta candidates ( $40 \%$ of the winners)

# How to Increase Proportionality 

-The more seats to fill, and
-The smaller the threshold needed to win a seat
-- The more proportional the elected body!

## Examples of

## Proportionality Limits

- Number of seats
- A 3-seat town council cannot represent all 4 "parties" in the electorate.
- Threshold
- If winning a seat requires at least $15 \%$ of the vote, then a "party" which garners only $3 \%$ of the vote doesn't get a seat.


## Multi-Winner Elections

## Promote PR

Cumulative Voting
(TX school districts)

Do Not Promote PR
Block Plurality Voting
(Denver, CO example)

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## Use of Cumulative Voting

## Most common PR method in US for

 governmental electionsTypically resulting from a judicial settlement to allow for more racial or ethnic minority representation

Sometimes Classified as "Semi-Proportional"

# Cumulative (Points) Voting Mechanics 

Simple to vote - Same instructions as plurality

- In a 5-winner election, a voter gets 5 votes
- Each candidate is listed 5 times - long ballot
- 1 vote each to 5 different candidates or
- 5 votes to 1 candidate or
- Some other distribution of their 5 votes

Simple to tally - top 5 vote-getters win

# Cumulative Voting <br> Chilton County, AL, 2016 - Vote for no more than Seven 



| 0 | Debil MaEx |
| :---: | :---: |
| 0 | BEBT L MEEE |
| 0 | BEBT L MGEE |
| 0 | PDEFTR Etwh |
| 0 | POEERTR Ehaby BiNOM |
| 0 | POBERTR Shiby GNON |
| 0 | POBERT R Etwhy Bind |
| 0 |  |
| 0 |  |
| 0 | ROGETR Bhiby Bidow |
| 0 | GLIEACHTOA |
| 0 | MPACRTOA |
| 0 | MPNGTON |
| 0 | AFACRTOA |
| 0 | NIDGGTON |
| 0 | MEACSTOA |
| 0 |  |
| 0 | NWE HMDEE |
| 0 | NWIE HARLEE |

Denver, Dec 7, 2019

## Cumulative Voting

## Proportional Voting Mechanics

- Each voter has an equal number of votes
- Each voter can distribute the votes unequally to candidates


## Multi-Winner Elections

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## MW Ranked Voting Ballot Format

## Rank candidates

- 1 for $1^{\text {st }}$ choice, 2 for $2^{\text {nd }}$ choice, etc.
- Usually prohibited: same ranking to 2 candidates
- $1^{\text {st }}$ choice is always counted

Single-winner ranked voting elections typically allow between 3 and 5 rankings, but when filling more than 1 seat, voters want more rankings - different kind of long ballot

# Cambridge 2017 Ballot <br> Elect 6 candidates 

| Only one vote per candidate. | DO NOT USE RED |
| :--- | :--- |
| Only one vote per column. | TO MARK BALLOT |



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Only one vote per candidate.
Only one vote per column.

DO NOT USE RED
TO MARK BALLOT

| MANIKKA L. BOWMAN, 134 Reed Streat | CASDDATE FOR RE-ELECTIOM <br> (1) (2) |
| :---: | :---: |
| FRAN A. CRONIN, 1 Kirball Lane |  |
| JAKE W. CRUTCHFIELD, 281 River Sreat |  |
| EMILY R. DEXTER, 9 Fenno Streat | che-ELectios (1) (2) |
| ALFRED B. FANTINI, 4 Canal Pak | CBDDDATEFA ME-ELEctiom (1) |
| ELECHI M. KADETE, 10 Laural Streat (1) (2) |  |
| KATHLEEN M. KELLY, 17 Marie Avenua cespliatifoh |  |
| LAURANCE V. KIMBROUGH, 24 Aberdean Avenue |  |
| WILLIAM MacARTHUR, 18 Shee Road |  |
| PIOTR FLAWIUSZ MITROS, 9 Michael Way (1) (2) |  |
| PATRICIA M. NOLAN, 184 Hurun Avenue | CBEDDATEFOM RE-ELECTIOM |
| DAVID J. WEINSTEIN, 45 S . Normandy Avenu | (1) (2) |

## Cambridge 2017 Ballot <br> Elect 6 candidates

Only one vote per candidate.
Only one vote per column.

| MANIKKA L. BOWMAN, 134 Reed Streat | CBMDDATE FOA RE-ELECTIOM | (1) (2) (3) |
| :---: | :---: | :---: |
| FRANA. CRONIN, 1 Kirball Lane |  | (1) (2) (3) |
| JAKE W. CRUTCHFIELD, 281 Rivar Sreat |  | (1) (2) (3) |
| EMILY R. DEXTER, 9 Fenno Streat | chabdatifol ME-ELECTIOH | (1) (2) (3) |
| ALFRED B. FANTINI, 4 Canal Pan | chadoatifor ME-ELECTIOA | (1) |
| ELECHI M. KADETE, 10 Laurel Streat |  | (1) (2) |
| KATHLEEN M. KELLY, 17 Marie Avenua | chadoate for ME-ELECTIOM | (1) (2) (3) |
| LAURANCE V. KIMB ROUGH, 24 Aberdean | Avenua | (1) (2) (3) |
| WILLIAM MacARTHUR, 18 Shea Road |  | - (2) (3) |
| PIOTR FLAWIUSZ MITROS, 9 Michaal Way |  | (1) (2) (3) |
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## Multi-Winner Elections

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(TX school districts)
Single Transferable Vote
(Cambridge, MA)
Mixed-Member PR*^
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Party List PR* (variations)
*Proportional by political party
^Includes some SW contests

# Single Transferable Vote One MW Ranking Method 

## 5 -winner election with 100 voters

10 candidates: Alphas (A1, A2, A3, A4, A5) Betas (B1, B2, B3, B4, B5)

- $60 \%$ of electorate ranks ballot A1, A2, A3, A4, A5
- $40 \%$ of electorate ranks ballot B1, B2, B3, B4, B5

Threshold to win $\rightarrow>1 / 6$ of votes $=17$ votes

# Single Transferable Vote One MW Ranking Method 

After Round 1: A1 elected

$$
\begin{array}{ll}
\text { A1, A2, A3, A4, A5 } & 60 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

A1's election uses up 17 votes out of 60

$$
60-17=43
$$

43 votes are transferred to A2

# Single Transferable Vote One MW Ranking Method 

After Round 2: A1, A2 elected

$$
\begin{array}{ll}
\text { A2, A3, A4, A5 } & 43 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

A2's election uses up 17 more Alpha votes

$$
43-17=26
$$

26 votes are transferred to A3

## Single Transferable Vote

 One MW Ranking MethodAfter Round 3: A1, A2, B1 elected

$$
\begin{array}{ll}
\text { A3, A4, A5 } & 26 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

B1's election uses up 17 Beta votes

$$
40-17=23
$$

23 votes are transferred to B2

## Single Transferable Vote One MW Ranking Method

After Round 4: A1, A2, B1, A3 elected

$$
\begin{array}{ll}
\text { A3, A4, A5 } & 26 \text { votes } \\
\text { B2, B3, B4, B5 } & 23 \text { votes }
\end{array}
$$

A3's election uses up 17 more Alpha votes

$$
26-17=9
$$

9 votes are transferred to A4

## Single Transferable Vote One MW Ranking Method

After Round 5: A1, A2, B1, A3, B2 elected
A4, A5
9 votes
B2, B3, B4, B5
23 votes
-- We have our 5 winners!

# Single Transferable Vote One MW Ranking Method 

Final Results are Proportional to
the electorate's voting
preferences:
A1, A2, B1, A3, B2 elected

3 Alpha winners (60\%)
2 Beta winners (40\%)

## Single Transferable Vote

 One MW Ranking Method
## Proportional Voting Mechanics

- Surpassing a threshold guarantees a seat.
- Each voter has only 1 vote but can rank the candidates. When a ballot's vote is for a candidate who is eliminated or is a surplus vote for a winning candidate, the single vote is transferred to the next ranking.


## Multi-Winner Elections

## Promote PR

Cumulative Voting (TX school districts)
Single Transferable Vote (Cambridge, MA)
Mixed-Member PR*^ (New Zealand since ‘96)
Party List PR* (variations)
*Proportional by political party
^Includes some SW contests

Do Not Promote PR
Block Plurality Voting (Denver, CO example)
Repeated Instant-Runoff
Ranked Choice Voting
(in 2019 Payson, Utah)

## Compare and Contrast

Two Multi-Winner Ranking Methods
Repeated Instant-Runoff Voting (IRV) RCV \&

Single Transferable Vote (STV) RCV


Voter's ballot experience is identical. Tallying is very different.

## SW MW PR?

## Both called (MW) RCV?

## Promotes PR

## Doesn't Promote PR

Single Transferable Vote
(since 1941 Cambridge)

Repeated Instant-Runoff Ranked Choice Voting
(in 2019 Payson, Utah)

## SW MW PR?

## Both called (MW) RCV?

## Promotes PR

Doesn't Promote PR

Single Transferable Vote
(since 1941 Cambridge)

Repeated Instant-Runoff Ranked Choice Voting
(in 2019 Payson, Utah)
SUPER CONFUSING! Let's call them by different names.

## Repeated IRV RCV Another MW Ranking Method

## 5-winner election with 100 voters

10 candidates: Alphas (A1, A2, A3, A4, A5) Betas (B1, B2, B3, B4, B5)

- $60 \%$ of electorate ranks ballot A1, A2, A3, A4, A5
- $40 \%$ of electorate ranks ballot B1, B2, B3, B4, B5

Threshold to win $\rightarrow>1 / 2$ of votes $=51$ votes

## Repeated IRV RCV

Another MW Ranking Method
After Round 1: A1 elected

$$
\begin{array}{ll}
\text { A1, A2, A3, A4, A5 } & 60 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

If you voted for a winner, now your ballot counts toward your next highest ranking. If you voted for A1, in the next round you get to vote for A2.

## Repeated IRV RCV

Another MW Ranking Method
After Round 2: A1, A2 elected

$$
\begin{array}{ll}
\text { A2, A3, A4, A5 } & 60 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

So far, Alpha voters voted for $\mathbf{2}$ candidates. Beta voters only voted for B1, a loser.

If you voted for A 2 , in the next round you get to vote for A3.

## Repeated IRV RCV

Another MW Ranking Method
After Round 3: A1, A2, A3 elected

$$
\begin{array}{ll}
\text { A3, A4, A5 } & 60 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

Beta voters are stuck voting for B1. We are seeing a repeating scenario.

If you voted for $A 3$, in the next round you get to vote for A4. Guess who wins round 4?

## Repeated IRV RCV

Another MW Ranking Method
After Round 4: A1, A2, A3, A4 elected

$$
\begin{array}{ll}
\text { A4, A5 } & 60 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

Beta voters will not elect any candidates, despite being $40 \%$ of the electorate.

If you voted for A4, in the next round you get to vote for A5.

## Repeated IRV RCV

Another MW Ranking Method
After Round 5: A1, A2, A3, A4, A5 elected

$$
\begin{array}{ll}
\text { A5 } & 60 \text { votes } \\
\text { B1, B2, B3, B4, B5 } & 40 \text { votes }
\end{array}
$$

Clean sweep for Alpha voters!

## Alphas win 100\% of the seats. <br> Not Proportional

## Compare and Contrast

## Block Plurality

Simple to understand

Repeated IRV RCV
Feels more expressive but many voters actually have less of a voice

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Simple to understand

Simple to vote

Repeated IRV RCV
Feels more expressive but many voters actually have less of a voice

Giving 2 candidates a \#1 ranking spoils the ballot

## Compare and Contrast

## Block Plurality

Simple to understand

Simple to vote

All votes are counted

Repeated IRV RCV
Feels more expressive but many voters actually have less of a voice

Giving 2 candidates a \#1 ranking spoils the ballot Number of votes counted on a ballot ranges from 1 to the \# of winners

## Compare and Contrast

## Block Plurality

Strategy: Voting for fewer candidates can help those candidates

Repeated IRV RCV
Strategy: To cast the most votes, vote for very popular candidates. To cast some votes, rank a very unpopular candidate \#1 and a popular candidate \#2. To cast one repeated ineffective vote, rank a so-so popular candidate \#1.

## Compare and Contrast

## Block Plurality

Strategy: Voting for fewer candidates can help those candidates

## Pending court case?

## Repeated IRV RCV

Strategy: To cast the most votes, vote for very popular candidates. To cast some votes, rank a very unpopular candidate \#1 and a popular candidate \#2. To cast one repeated ineffective vote, rank a so-so popular candidate \#1.

## Repeated IRV RCV

Another MW Ranking Method

# Strong argument to be made that 

Repeated IRV RCV is worse than Block Plurality Voting!

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Single Transferable Vote (Cambridge, MA)
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## Do Not Promote PR

Block Plurality Voting (Denver, CO example)
Repeated Instant-Runoff
Ranked Choice Voting
(in 2019 Payson, Utah)
Bucklin Voting
(used in >60 cities in early $20^{\text {th }}$ century)

## Multi-Winner Elections

## Deserve More Attention

Look for opportunities to hold multi-winner elections

- Eliminate gerrymandering
- Increase competitiveness IVoted
- Use a voting method that promotes proportional
 representation (PR)


## To Solve Gerrymandering and Have More Competitive Elections ...

# Create multi-member districts and conduct multi-winner elections 

To have an Elected Multi-Member Body Better Represent the Diversity of the Electorate ...

> Use a voting method that promotes proportional representation

## For more information

Iwvbc.org > Teams at Work > Voting Methods

## Thank you

## for your interest!

TMNT LEAGUE of WOMEN VOTERS* OF BOULDER COUNTY

Empowering Voters<br>Defending Democracy

