Voter Participation with Ranked Choice Voting in the United States

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RCV Might Increase Participation

- Return of “deliberative” democrats.
- Reduce “wasted vote” concerns
- More candidates = more mobilization
RCV Might Reduce Participation

- Americans are used to plurality voting.
- RCV is more cognitively demanding.
Match RCV cities to similar cities with plurality elections on the same date.

<table>
<thead>
<tr>
<th>RCV City</th>
<th>Matched Plurality Cities</th>
<th>Elections before RCV</th>
<th>Elections after RCV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis, MN</td>
<td>Boston, MA</td>
<td>2005</td>
<td>2009, 2013</td>
</tr>
<tr>
<td></td>
<td>Cincinnati, OH</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tulsa, OK</td>
<td></td>
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<tr>
<td></td>
<td>Seattle, WA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Paul, MN</td>
<td>Cedar Rapids, IA</td>
<td>2009</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Des Moines, IA</td>
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<tr>
<td></td>
<td>Madison, WI</td>
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<tr>
<td></td>
<td>Spokane, WA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambridge, MA</td>
<td>Ann Arbor, MI</td>
<td>----</td>
<td>2013</td>
</tr>
<tr>
<td></td>
<td>Lowell, MA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stamford, CT</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Worcester, MA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Statistical Model

- Difference-in-difference (DID) method:
  \[ Y = \beta_{0} + \beta_{1} RCV + \beta_{2} After + \beta_{3} RCV \times After + \theta X \]

- \( \beta_{3} \) estimates the RCV treatment effect.

- Measures of participation:
  - Turnout
  - Residual votes
  - Spoiled ballots
Mean Turnout in RCV and Plurality Elections

Participation in RCV and Plurality Elections
Mean Residual Vote Rate for Top Contest in RCV and Plurality Cities

Participation in RCV and Plurality Elections
The Minneapolis Case: 2013

- In 2013, turnout was higher in high income and white majority wards (Jacobs and Miller 2014).
- Is this bad?

![Figure 3. Turnout Percentage, 2013 Minneapolis Election](chart)

- Green bars represent the percentage of residents living below the poverty line.
- Blue bars represent the percentage of minority residents.

Participation in RCV and Plurality Elections
The Minneapolis Case: 2013

- In 2013, turnout was higher in high income and white majority wards (Jacobs and Miller 2014).
- Is this bad? Compared to what?

![Figure 3. Turnout Percentage, 2013 Minneapolis Election](chart)

- Percentage of residents living below the poverty line: lowest 42%, highest 39%
- Percentage of minority residents: lowest 28%, highest 26%
Minneapolis Voter Turnout by Ward Before and After RCV Adoption

Participation in RCV and Plurality Elections

<table>
<thead>
<tr>
<th>Income Level</th>
<th>2005</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>High income wards</td>
<td>38.1</td>
<td>41.7</td>
</tr>
<tr>
<td>Middle income wards</td>
<td>28.5</td>
<td>31.4</td>
</tr>
<tr>
<td>Low income wards</td>
<td>24</td>
<td>27.7</td>
</tr>
</tbody>
</table>
Spoiled Ballot Rates by Ward Before and After RCV Adoption

Participation in RCV and Plurality Elections

Income Level
- High income wards
- Middle income wards
- Low income wards

Spoiled Ballots (Percent)
- 2005: 0.7, 1.2, 1.8
- 2013: 3.5, 4.3, 5.2

Income Levels:
- High income wards
- Middle income wards
- Low income wards
Residual Vote for Mayor (1st choice) Before and After RCV Adoption

Participation in RCV and Plurality Elections

Residual Vote Rate (Percent)

<table>
<thead>
<tr>
<th>Year</th>
<th>High income wards</th>
<th>Middle income wards</th>
<th>Low income wards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>0.7</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>2013</td>
<td>0.4</td>
<td>1.3</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Income Level

- High income wards
- Middle income wards
- Low income wards
### Residual Vote for City Council (1\textsuperscript{st} choice)
Before and After RCV Adoption

#### Participation in RCV and Plurality Elections

<table>
<thead>
<tr>
<th>Year</th>
<th>White wards</th>
<th>Mixed wards</th>
<th>Minority wards</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>3.4</td>
<td>5.5</td>
<td>6.4</td>
</tr>
<tr>
<td>2013</td>
<td>3.9</td>
<td>7.2</td>
<td>3.6</td>
</tr>
</tbody>
</table>

#### Racial Composition of Wards

- **White wards**
- **Mixed wards**
- **Minority wards**
Conclusion

- Preliminary results
- Caution: small amount of evidence
- Database will be expanded
- Careful comparisons are needed to assess electoral reforms.
Additional Sources

