

# Counter to intent

Voters' mental models of  
alternative counting methods

Dana Chisnell

@danachis

@ChadButterfly

## Video emerges claiming to show Russia ballot box 'stuffing'



## Video emerges claiming to show Russia ballot box 'stuffing'



**Not.**

- Ranked Choice Voting
- Instant Run-off Voting
- Fusion or Cumulative Voting

## RANKED-CHOICE VOTING BALLOT

**INSTRUCTIONS TO VOTERS: USE BLACK OR BLUE BALLPOINT PEN ONLY.** To vote for a candidate of your choice, complete the arrow  to the right of the candidate's name. To vote for a qualified write-in candidate, PRINT the person's name in the blank space provided and complete the arrow. You may rank up to three choices. Vote across in each race.

- 1** Mark your first choice in Column 1.
- 2** Mark your second choice in Column 2. This choice must be different from your first choice.
- 3** Mark your third choice in Column 3. This choice must be different from your first and second choices.

NONPARTISAN FOR MAYOR	NONPARTISAN FOR MAYOR	NONPARTISAN FOR MAYOR
<b>1</b> FIRST CHOICE	<b>2</b> SECOND CHOICE <small>(This must be different from your first choice.)</small>	<b>3</b> THIRD CHOICE <small>(This must be different from your first and second choices.)</small>
<small>Vote for One</small>	<small>Vote for One</small>	<small>Vote for One</small>
MICHAEL MARCHESANI ←	MICHAEL MARCHESANI ←	MICHAEL MARCHESANI ←
KENNETH MITHCELL ←	KENNETH MITHCELL ←	KENNETH MITHCELL ←
ORVILLE WHITE ←	ORVILLE WHITE ←	ORVILLE WHITE ←
GREGORY SELDON ←	GREGORY SELDON ←	GREGORY SELDON ←
HARVEY EAGLE ←	HARVEY EAGLE ←	HARVEY EAGLE ←
RANDALL RUPP ←	RANDALL RUPP ←	RANDALL RUPP ←
FOR DISTRICT ATTORNEY	FOR DISTRICT ATTORNEY	FOR DISTRICT ATTORNEY
<b>1</b> FIRST CHOICE	<b>2</b> SECOND CHOICE <small>(This must be different from your first choice.)</small>	<b>3</b> THIRD CHOICE <small>(This must be different from your first and second choices.)</small>
<small>Vote for One</small>	<small>Vote for One</small>	<small>Vote for One</small>
ANNA MAE SILVER ←	ANNA MAE SILVER ←	ANNA MAE SILVER ←
ROBERT DEMERGUE ←	ROBERT DEMERGUE ←	ROBERT DEMERGUE ←
ESTER YORK ←	ESTER YORK ←	ESTER YORK ←
ELMER HULL ←	ELMER HULL ←	ELMER HULL ←
HARVEY SMITH ←	HARVEY SMITH ←	HARVEY SMITH ←
CARROLL BARKER ←	CARROLL BARKER ←	CARROLL BARKER ←
FOR ASSESSOR	FOR ASSESSOR	FOR ASSESSOR
<b>1</b> FIRST CHOICE	<b>2</b> SECOND CHOICE <small>(This must be different from your first choice.)</small>	<b>3</b> THIRD CHOICE <small>(This must be different from your first and second choices.)</small>
<small>Vote for One</small>	<small>Vote for One</small>	<small>Vote for One</small>
CARROLL SHRY ←	CARROLL SHRY ←	CARROLL SHRY ←
BEVERLY BARKER ←	BEVERLY BARKER ←	BEVERLY BARKER ←
DONALD DAVIS ←	DONALD DAVIS ←	DONALD DAVIS ←
HUGH SMITH ←	HUGH SMITH ←	HUGH SMITH ←
REID FEISTER ←	REID FEISTER ←	REID FEISTER ←
BEVERLY SHRY ←	BEVERLY SHRY ←	BEVERLY SHRY ←
DONALD RUPP ←	DONALD RUPP ←	DONALD RUPP ←
HUGH FEISTER ←	HUGH FEISTER ←	HUGH FEISTER ←
JANET STERNER ←	JANET STERNER ←	JANET STERNER ←
CAROL SIONKOWSKI ←	CAROL SIONKOWSKI ←	CAROL SIONKOWSKI ←
DON CALVERT ←	DON CALVERT ←	DON CALVERT ←
MICHAEL SPOOL ←	MICHAEL SPOOL ←	MICHAEL SPOOL ←

# How are the votes counted?

**Ballot design problems are  
well understood**

# Ballot design problems are well understood

split contests across columns

**overvoting**

there are responses on both sides of names

**overvoting**

arrows rather than bubbles

**marking incorrectly**

formatting is inconsistent or too consistent

**undervoting**

instructions are complicated or lacking

**all kinds of crazy things**

voters don't know how to correct their ballots

**lost votes**

# Ranked Choice

# Voting

adds a twist

- San Francisco and Oakland,  
December 2011
- EVN, March 2012

**Official Ballot  
General Municipal Election  
Portland, Maine  
Peaks Island  
November 8, 2011**

*Katherine L. Jones*  
CITY CLERK

**INSTRUCTIONS TO VOTERS**

- A. To vote, complete the oval(s)  next to your choice(s), like this:
- B. Follow directions as to the number of candidates to be voted for each office.
- C. To vote for a write-in candidate, write the person's name in the write-in space and fill in the oval next to the name.
- D. If you make a mistake, do not erase; ask for a new ballot.

<p align="center"><b>School Board At Large</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> <b>Holton, Elizabeth H.</b> <small>18 Victoria Street</small></p> <p><input type="radio"/> <b>Okot, Josephine A.</b> <small>34 Dartmouth Street #4</small></p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Peaks Island Council</b></p> <p align="center">Three Year Term      Vote For Two</p> <p><input type="radio"/> _____ Write-in</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Casco Bay Lines Director Great Diamond Island</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> <b>Hoffner, Kathleen B.</b> <small>30 Pleasant Cove Lane</small></p> <p><input type="radio"/> <b>Robinson, Roger E.</b> <small>159 Crescent Avenue</small></p> <p><input type="radio"/> _____ Write-in</p>
<p align="center"><b>Portland Water District Trustee</b></p> <p align="center">Five Year Term      Vote For One</p> <p><input type="radio"/> <b>Cleaves, Bradford S.</b> <small>122 Salem Street</small></p> <p><input type="radio"/> <b>Safarik, John W.</b> <small>24 Ivy Street</small></p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Peaks Island Council</b></p> <p align="center">One Year Term      Vote For Two</p> <p><input type="radio"/> <b>Mitchell, Mary Anne</b> <small>31 Sterling Street</small></p> <p><input type="radio"/> _____ Write-in</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Casco Bay Lines Director Little Diamond Island</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> _____ Write-in</p>
	<p align="center"><b>Peaks Island Council</b></p> <p align="center">Two Year Term      Vote For One</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Casco Bay Lines Director Peaks Island</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> <b>Flynn, Patrick T.</b> <small>13 Centennial Street</small></p> <p><input type="radio"/> _____ Write-in</p>

PLEASE CONTINUE VOTING ON OTHER SIDE

**Official Ballot  
General Municipal Election  
Portland, Maine  
November 8, 2011**

- A. To vote, complete the oval(s)  next to your choice(s), like this:
- B. Follow the special instructions for the mayoral election.
- C. To vote for a write-in candidate, write the person's name in the write-in space and fill in the oval next to the name.
- D. If you make a mistake, do not erase; ask for a new ballot.

**For MAYOR  
Four-Year Term**

Rank candidates in order of your choice)

	1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice	6th Choice	7th Choice	8th Choice	9th Choice	10th Choice	11th Choice	12th Choice	13th Choice	14th Choice	15th Choice
<b>Draydon, Charles E.</b> <small>Munjoy South</small>	<input type="radio"/>														
<b>Drinnan, Michael F.</b> <small>Wellington Road</small>	<input type="radio"/>														
<b>Drury, Peter G.</b> <small>Back Cove Estates #18</small>	<input type="radio"/>														
<b>Drummond, Ralph C.</b> <small>15 North Street #1</small>	<input type="radio"/>														
<b>Drummond, Richard A.</b> <small>281 Forest Avenue</small>	<input type="radio"/>														
<b>Drummond, Jill C.</b> <small>11 Pennell Avenue</small>	<input type="radio"/>														
<b>Drummond, John M.</b> <small>11 Gray Street</small>	<input type="radio"/>														
<b>Drummond, Hamza A.</b> <small>Coast Lane</small>	<input type="radio"/>														
<b>Drummond, Jodie L.</b> <small>Cushman Street</small>	<input type="radio"/>														
<b>Drummond, David A.</b> <small>1 Pine Street</small>	<input type="radio"/>														
<b>Drummond, Nicholas M. Jr.</b> <small>1 Chenery Street</small>	<input type="radio"/>														
<b>Drummond, Markos S.</b> <small>7 Atlantic Street</small>	<input type="radio"/>														
<b>Drummond, Jed</b> <small>Everett Street</small>	<input type="radio"/>														
<b>Drummond, Ethan K.</b> <small>1 Spring Street</small>	<input type="radio"/>														
<b>Drummond, Christopher L.</b> <small>19 Washington Avenue</small>	<input type="radio"/>														
Write-in	<input type="radio"/>														

No more than one oval per column No more than one oval per candidate

PLEASE CONTINUE VOTING ON OTHER SIDE

- Special Instructions: Rank Mayor in order of Choice
- Fill in the oval to the choice
  - Select a 2nd choice, choice oval to the right
  - Continue until you have your choices
  - You may rank as many as you wish
  - Fill in no more than one candidate
  - Fill in no more than one column.

**Portland, Maine 2011**



**OFFICIAL BALLOT**  
**CITY GENERAL ELECTION BALLOT**

STATE OF MINNESOTA NOVEMBER 3, 2011 CITY OF MINNEAPOLIS

**Ranked Choice Voting**

**Instructions**

**How to make your candidate choice**

1. Pick your first choice candidate and completely fill in the oval next to that candidate under First Choice, like this:

CANDIDATE NAME

2. If you have a second choice candidate, completely fill in the oval next to that candidate under Second Choice.

3. Your third choice candidate, if you have one, works the same way.

All three choices (if you choose to have three) must be different from each other.

If you make a mistake - or cross out or make a stray mark - ask for a new ballot. Otherwise your vote may not count.



**Correct:**  
Correct: Choose different candidates in different columns.



**Wrong:**  
Wrong: Voter chose the same candidate more than once.



**Wrong:**  
Wrong: Voter chose more than one candidate in the same column.

Begin voting below

**CITY OFFICES**

**MAYOR** Mark your first, second and third choice candidates in the columns below. One to be elected.

1 First Choice	2 Second Choice	3 Third Choice
<input type="radio"/> PAPA JOHN KOLSTAD Independent/Onic Leader	<input type="radio"/> PAPA JOHN KOLSTAD Independent/Onic Leader	<input type="radio"/> PAPA JOHN KOLSTAD Independent/Onic Leader
<input type="radio"/> JOHN CHARLES WILSON Edgerton National Party	<input type="radio"/> JOHN CHARLES WILSON Edgerton National Party	<input type="radio"/> JOHN CHARLES WILSON Edgerton National Party
<input type="radio"/> JOEY LOMBARD It Amosca	<input type="radio"/> JOEY LOMBARD It Amosca	<input type="radio"/> JOEY LOMBARD It Amosca
<input type="radio"/> BOB GARNEY JR. Moderate Progressive/Conservad	<input type="radio"/> BOB GARNEY JR. Moderate Progressive/Conservad	<input type="radio"/> BOB GARNEY JR. Moderate Progressive/Conservad
<input type="radio"/> BILL MCGAUGHEY New Dignity Party	<input type="radio"/> BILL MCGAUGHEY New Dignity Party	<input type="radio"/> BILL MCGAUGHEY New Dignity Party
<input type="radio"/> TOM RISKE Socialist/Workers Party	<input type="radio"/> TOM RISKE Socialist/Workers Party	<input type="radio"/> TOM RISKE Socialist/Workers Party
<input type="radio"/> R.T. NYBAK Democrat-Farmer-Labor	<input type="radio"/> R.T. NYBAK Democrat-Farmer-Labor	<input type="radio"/> R.T. NYBAK Democrat-Farmer-Labor
<input type="radio"/> JAMES R. EVERETT Social Conservatism	<input type="radio"/> JAMES R. EVERETT Social Conservatism	<input type="radio"/> JAMES R. EVERETT Social Conservatism
<input type="radio"/> AL FLOWERS Democrat-Farmer-Labor	<input type="radio"/> AL FLOWERS Democrat-Farmer-Labor	<input type="radio"/> AL FLOWERS Democrat-Farmer-Labor
<input type="radio"/> DICK FRANKSON Democrat-Farmer-Labor	<input type="radio"/> DICK FRANKSON Democrat-Farmer-Labor	<input type="radio"/> DICK FRANKSON Democrat-Farmer-Labor
<input type="radio"/> CHRISTOPHER CLARK Democrat	<input type="radio"/> CHRISTOPHER CLARK Democrat	<input type="radio"/> CHRISTOPHER CLARK Democrat
<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any

**COUNCIL MEMBER WARD FOUR** Mark your first, second and third choice candidates in the columns below. One to be elected.

1 First Choice	2 Second Choice	3 Third Choice
<input type="radio"/> BARBARA A. "BARB" JOHNSON Democrat-Farmer-Labor	<input type="radio"/> BARBARA A. "BARB" JOHNSON Democrat-Farmer-Labor	<input type="radio"/> BARBARA A. "BARB" JOHNSON Democrat-Farmer-Labor
<input type="radio"/> GRANT CERBAK Independent	<input type="radio"/> GRANT CERBAK Independent	<input type="radio"/> GRANT CERBAK Independent

**ATTENTION VOTER:** See other side for voting instructions

STATE OF MINNESOTA NOVEMBER 3, 2011 CITY OF MINNEAPOLIS

**BOARD OF ESTIMATE AND TAXATION** Mark your first, second and third choice candidates in the columns below. Two to be elected.

1 First Choice	2 Second Choice	3 Third Choice
<input type="radio"/> JAMES ELLIOT SMARTWOOD	<input type="radio"/> JAMES ELLIOT SMARTWOOD	<input type="radio"/> JAMES ELLIOT SMARTWOOD
<input type="radio"/> DAVID WHEELER	<input type="radio"/> DAVID WHEELER	<input type="radio"/> DAVID WHEELER
<input type="radio"/> R. MICHAEL BARTENS	<input type="radio"/> R. MICHAEL BARTENS	<input type="radio"/> R. MICHAEL BARTENS
<input type="radio"/> PHIL WILKIE	<input type="radio"/> PHIL WILKIE	<input type="radio"/> PHIL WILKIE
<input type="radio"/> DEWAYNE TONSOND	<input type="radio"/> DEWAYNE TONSOND	<input type="radio"/> DEWAYNE TONSOND
<input type="radio"/> CAROL BECKER	<input type="radio"/> CAROL BECKER	<input type="radio"/> CAROL BECKER
<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any

**PARK AND RECREATION COMMISSIONER AT LARGE** Mark your first, second and third choice candidates in the columns below. Three to be elected.

1 First Choice	2 Second Choice	3 Third Choice
<input type="radio"/> NANCY BERNARD	<input type="radio"/> NANCY BERNARD	<input type="radio"/> NANCY BERNARD
<input type="radio"/> JOHN BUTLER	<input type="radio"/> JOHN BUTLER	<input type="radio"/> JOHN BUTLER
<input type="radio"/> MARY McFILL AND ENSON	<input type="radio"/> MARY McFILL AND ENSON	<input type="radio"/> MARY McFILL AND ENSON
<input type="radio"/> JOHN EYRN	<input type="radio"/> JOHN EYRN	<input type="radio"/> JOHN EYRN
<input type="radio"/> ANNIE YOUNG	<input type="radio"/> ANNIE YOUNG	<input type="radio"/> ANNIE YOUNG
<input type="radio"/> TOM HOPDYKE	<input type="radio"/> TOM HOPDYKE	<input type="radio"/> TOM HOPDYKE
<input type="radio"/> DAVID WAHLSTEDT	<input type="radio"/> DAVID WAHLSTEDT	<input type="radio"/> DAVID WAHLSTEDT
<input type="radio"/> BOB FINE	<input type="radio"/> BOB FINE	<input type="radio"/> BOB FINE
<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any

**PARK AND RECREATION COMMISSIONER DISTRICT TWO** Mark your first, second and third choice candidates in the columns below. One to be elected.

1 First Choice	2 Second Choice	3 Third Choice
<input type="radio"/> JON OLSON	<input type="radio"/> JON OLSON	<input type="radio"/> JON OLSON
<input type="radio"/> MICHAEL GUEST	<input type="radio"/> MICHAEL GUEST	<input type="radio"/> MICHAEL GUEST
<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any	<input type="radio"/> write-in, if any

**CITY QUESTIONS**

To vote for a question, completely fill in the oval

**Minneapolis 2011**

**Instructions**



To vote for a candidate whose name is printed on this ballot fill in the oval above the name of the candidate.  
 To vote for a person whose name is not printed on this ballot write or stamp his or her name in the space labeled "write-in" that appears at the end of the row for such office and fill in the oval corresponding with the write-in space in which you have written in a name.

Do not overvote. If you select a greater number of candidates than there are vacancies to be filled, your ballot will be void for that public office, party position or proposal.  
 Please read more instructions on other side of ballot.



**Official Ballot for the General Election**  
**12th Assembly District, County of Broome**  
**City of Binghamton, Election District 26**

November 2nd, 2011 State of New York Ballot ID: 1026

	Governor and Lieutenant Governor Vote once	Comptroller Vote for 1	Attorney General Vote for 1	U.S. Senator (6-year term) Vote for 1	U.S. Senator (2-year unexpired term) Vote for 1	Representative in Congress 22nd District Vote for 1	State Senator 52nd District Vote for 1	Member of Assembly Vote for 1	Surrogate Court Judge Vote for 1	County Judge Vote for 1	Sheriff Vote for 1	County Legislator 1st District Vote for 1
Democratic	<input type="radio"/> Andrew M Cuomo and Robert J Duffy Democratic	<input type="radio"/> Thomas P DiNapoli Democratic	<input type="radio"/> Eric T Schneiderman Democratic	<input type="radio"/> Charles E Schumer Democratic	<input type="radio"/> Kirsten E Gillibrand Democratic	<input type="radio"/> Maurice D Hinchey Democratic	<input type="radio"/> John P Orzel Democratic	<input type="radio"/> Donna A Lupardo Democratic			<input type="radio"/> Gary F O'Neill Democratic	<input type="radio"/> Mark Whalen Democratic
Republican	<input type="radio"/> Carl P Paladino and Gregory J Edwards Republican	<input type="radio"/> Harry Wilson Republican	<input type="radio"/> Dan Donovan Republican	<input type="radio"/> Jay Townsend Republican	<input type="radio"/> Joseph J DiGuardi Republican	<input type="radio"/> George K Phillips Republican	<input type="radio"/> Thomas W Libous Republican	<input type="radio"/> Arthur Garrison Republican	<input type="radio"/> David H Guy Republican	<input type="radio"/> Martin E Smith Republican	<input type="radio"/> David E Harder Republican	
Independence	<input type="radio"/> Andrew M Cuomo and Robert J Duffy Independence	<input type="radio"/> Harry Wilson Independence	<input type="radio"/> Eric T Schneiderman Independence	<input type="radio"/> Charles E Schumer Independence	<input type="radio"/> Kirsten E Gillibrand Independence	<input type="radio"/> Maurice D Hinchey Independence	<input type="radio"/> Thomas W Libous Independence	<input type="radio"/> Arthur Garrison Independence			<input type="radio"/> David E Harder Independence	
Conservative	<input type="radio"/> Carl P Paladino and Gregory J Edwards Conservative	<input type="radio"/> Harry Wilson Conservative	<input type="radio"/> Dan Donovan Conservative	<input type="radio"/> Jay Townsend Conservative	<input type="radio"/> Joseph J DiGuardi Conservative	<input type="radio"/> George K Phillips Conservative	<input type="radio"/> Thomas W Libous Conservative	<input type="radio"/> Arthur Garrison Conservative			<input type="radio"/> David E Harder Conservative	
Working Families	<input type="radio"/> Andrew M Cuomo and Robert J Duffy Working Families	<input type="radio"/> Thomas P DiNapoli Working Families	<input type="radio"/> Eric T Schneiderman Working Families	<input type="radio"/> Charles E Schumer Working Families	<input type="radio"/> Kirsten E Gillibrand Working Families	<input type="radio"/> Maurice D Hinchey Working Families		<input type="radio"/> Donna A Lupardo Working Families		<input type="radio"/> Martin E Smith Working Families	<input type="radio"/> TR Roberts Working Families	
Green	<input type="radio"/> Howie Hawkins and Gloria Mattera Green	<input type="radio"/> Julia A Willebrand Green		<input type="radio"/> Colia Clark Green	<input type="radio"/> Cecile A Lawrence Green			<input type="radio"/> Jason T Stokes Our Founding Fathers				
Rent Is 2 Damn High	<input type="radio"/> Jimmy McMillan Rent Is 2 Damn High				<input type="radio"/> Joseph Huff Rent Is 2 Damn High							
Libertarian Freedom	<input type="radio"/> Warren Redlich and Alden Link Libertarian	<input type="radio"/> Charles Barron and Eva M Doyle Freedom	<input type="radio"/> John Gaetani Libertarian	<input type="radio"/> Carl E Person Libertarian	<input type="radio"/> Randy A Credico Libertarian Antiprohibition	<input type="radio"/> John Clifton Libertarian						
Taxpayers Antiprohibition	<input type="radio"/> Carl P Paladino and Gregory J Edwards Taxpayers	<input type="radio"/> Kristin M Davis and Tanya Gendelman Antiprohibition		<input type="radio"/> Ramon J Jimenez Freedom		<input type="radio"/> Vivia Morgan Antiprohibition	<input type="radio"/> Bruce Blakeman Tax Revolt					
Write-in	write-in:		write-in:	write-in:	write-in:	write-in:	write-in:	write-in:	write-in:	write-in:	write-in:	write-in:

Turn ballot over →

**New York state demo**

## Alameda County Ballot

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<b>Mayor</b>	Michael Marchesni	<i>Believes in the goodness of fruit.</i>
	Kenneth Mithcell	<i>Feels life is too short to drink cheap wine.</i>
	Orville White	<i>Declares that there is no gray area.</i>
	Gregory Seldon	<i>Executive director of Association of Creeps.</i>
	Harvey Eagle	<i>Wants to reunite the US with the United Kingdom.</i>
	Randall Rupp	<i>Loves the Dodgers.</i>

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<b>District Attorney</b>	Anna Mae Silver	<i>Sees the goodness in every situation.</i>
	Robert Demergue	<i>Hates the Sharks.</i>
	Esther York	<i>Thinks cowards should get a break.</i>
	Elmer Hull	<i>Drinks what he likes, which is beer.</i>
	Harvey Smith	<i>Believes in fresh scents.</i>
	Carroll Barker	<i>Kicks dogs.</i>

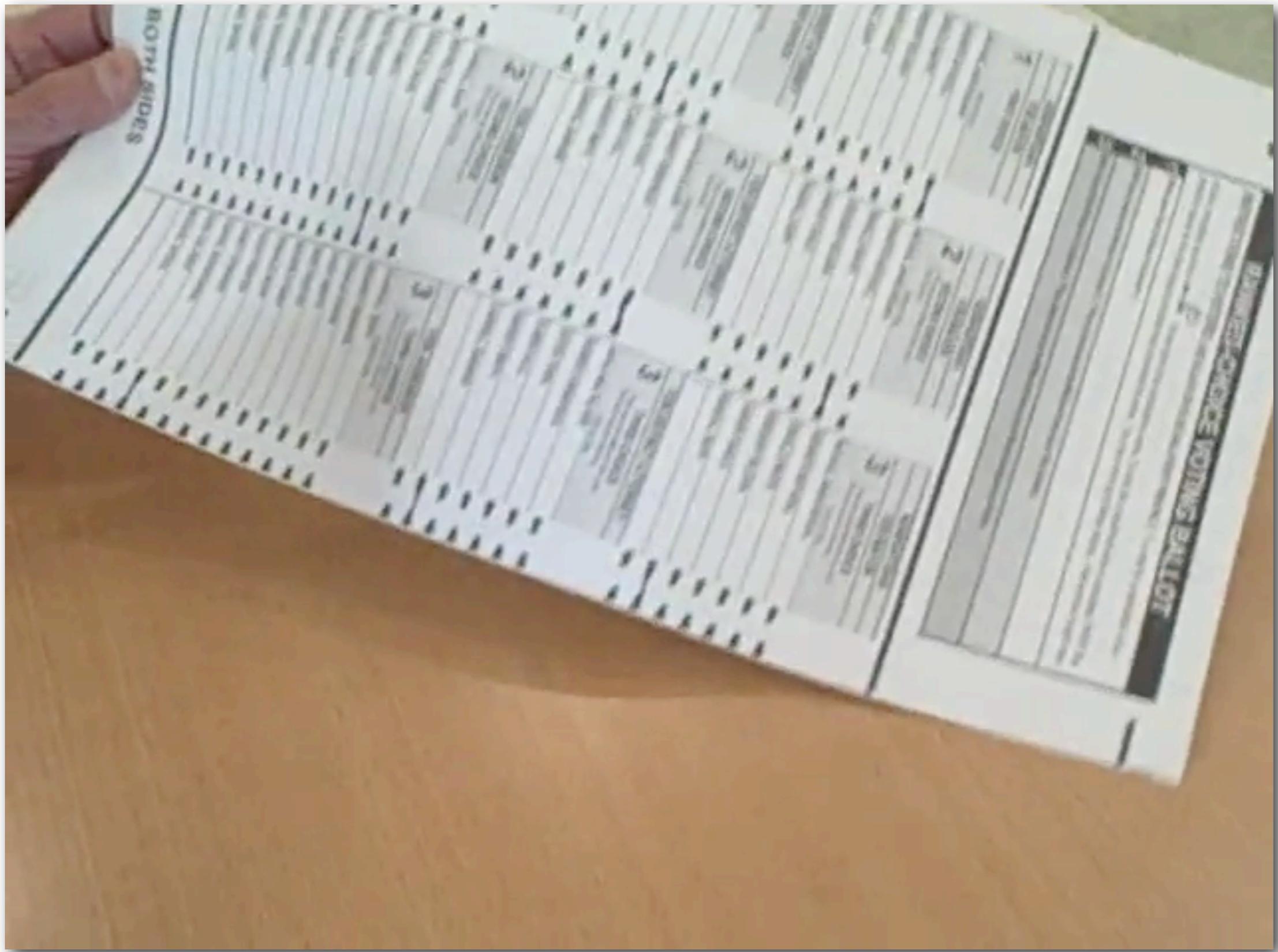
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<b>Assessor</b>	Carroll Shry	<i>Wants a flea market in Union Square.</i>
	Beverley Barker	<i>Believes in the warm, dry winters.</i>
	Donald Davis	<i>Thinks teachers should rule.</i>
	Hugh Smith	<i>Wants the US to annex Canada.</i>
	Beverly Shry	<i>Friend of Big Business.</i>
	Donald Rupp	<i>Wants to fill in the Bay.</i>
	Hugh Feister	<i>Thinks transit should run like clockwork.</i>
	Janet Sterner	<i>Wants to outlaw dust bunnies.</i>
	Carol Sionkowski	<i>Treats city parks like her back yard.</i>
	Don Calvert	<i>Believes that gambling is a right.</i>
	Michael Spool	<i>Wants bike lanes on every road.</i>

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# Voter slate







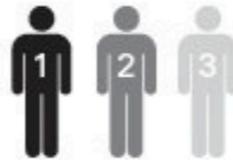


# How Ranked-Choice Voting Works

## General rules

- Initially, everyone's vote counts for his or her first-choice candidate. If a candidate has the majority—more than half—of these votes, that candidate wins.
- If no candidate has the majority of votes, the candidate in last place is eliminated. Votes for the eliminated candidate transfer to the next-choice candidates marked on those ballots.
- If one candidate has the majority after these votes are transferred, that candidate wins.
- If there is still no candidate with the majority of votes, the process of eliminating candidates and transferring votes continues until one candidate has the majority.

## How your choices are counted



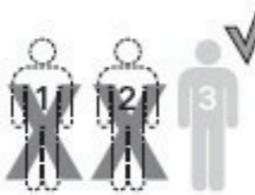
Your vote counts for your first choice as long as the candidate has not been eliminated.



If your first choice is eliminated, your vote will count for your second choice instead.



If both your first and second choices are eliminated, your vote will count for your third choice.



# When marking your ranked-choice ballot:



FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO	FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO	FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO
1 FIRST CHOICE PRIMERA PREFERENCIA	2 SECOND CHOICE SEGUNDA PREFERENCIA	3 THIRD CHOICE TERCERA PREFERENCIA
<input type="checkbox"/> Vote for One Vota por Uno	<input type="checkbox"/> Vote for One. Must be different from your first choice. Vota por Uno. Debe ser diferente de su primera preferencia.	<input type="checkbox"/> Vote for One. Must be different from your first and second choice. Vota por Uno. Debe ser diferente de su primera y segunda preferencia.
ALCATRAZ ISLAND ALCATRAZ ISLAND ISLA DE ALCATRAZ COIT TOWER TORRE DE COIT FISHERMAN'S WHARF FISHERMAN'S WHARF GOLDEN GATE PARK PARQUE GOLDEN GATE	ALCATRAZ ISLAND ALCATRAZ ISLAND ISLA DE ALCATRAZ COIT TOWER TORRE DE COIT FISHERMAN'S WHARF FISHERMAN'S WHARF GOLDEN GATE PARK PARQUE GOLDEN GATE	ALCATRAZ ISLAND ALCATRAZ ISLAND ISLA DE ALCATRAZ COIT TOWER TORRE DE COIT FISHERMAN'S WHARF FISHERMAN'S WHARF GOLDEN GATE PARK PARQUE GOLDEN GATE

Choose a different candidate in each column. To rank fewer than three candidates, leave columns blank.



FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO	FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO	FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO
1 FIRST CHOICE PRIMERA PREFERENCIA	2 SECOND CHOICE SEGUNDA PREFERENCIA	3 THIRD CHOICE TERCERA PREFERENCIA
<input type="checkbox"/> Vote for One Vota por Uno	<input type="checkbox"/> Vote for One. Must be different from your first choice. Vota por Uno. Debe ser diferente de su primera preferencia.	<input type="checkbox"/> Vote for One. Must be different from your first and second choice. Vota por Uno. Debe ser diferente de su primera y segunda preferencia.
ALCATRAZ ISLAND ALCATRAZ ISLAND ISLA DE ALCATRAZ COIT TOWER TORRE DE COIT FISHERMAN'S WHARF FISHERMAN'S WHARF GOLDEN GATE PARK PARQUE GOLDEN GATE	ALCATRAZ ISLAND ALCATRAZ ISLAND ISLA DE ALCATRAZ COIT TOWER TORRE DE COIT FISHERMAN'S WHARF FISHERMAN'S WHARF GOLDEN GATE PARK PARQUE GOLDEN GATE	ALCATRAZ ISLAND ALCATRAZ ISLAND ISLA DE ALCATRAZ COIT TOWER TORRE DE COIT FISHERMAN'S WHARF FISHERMAN'S WHARF GOLDEN GATE PARK PARQUE GOLDEN GATE

Do not mark more than one candidate in a column. Your vote will not count.

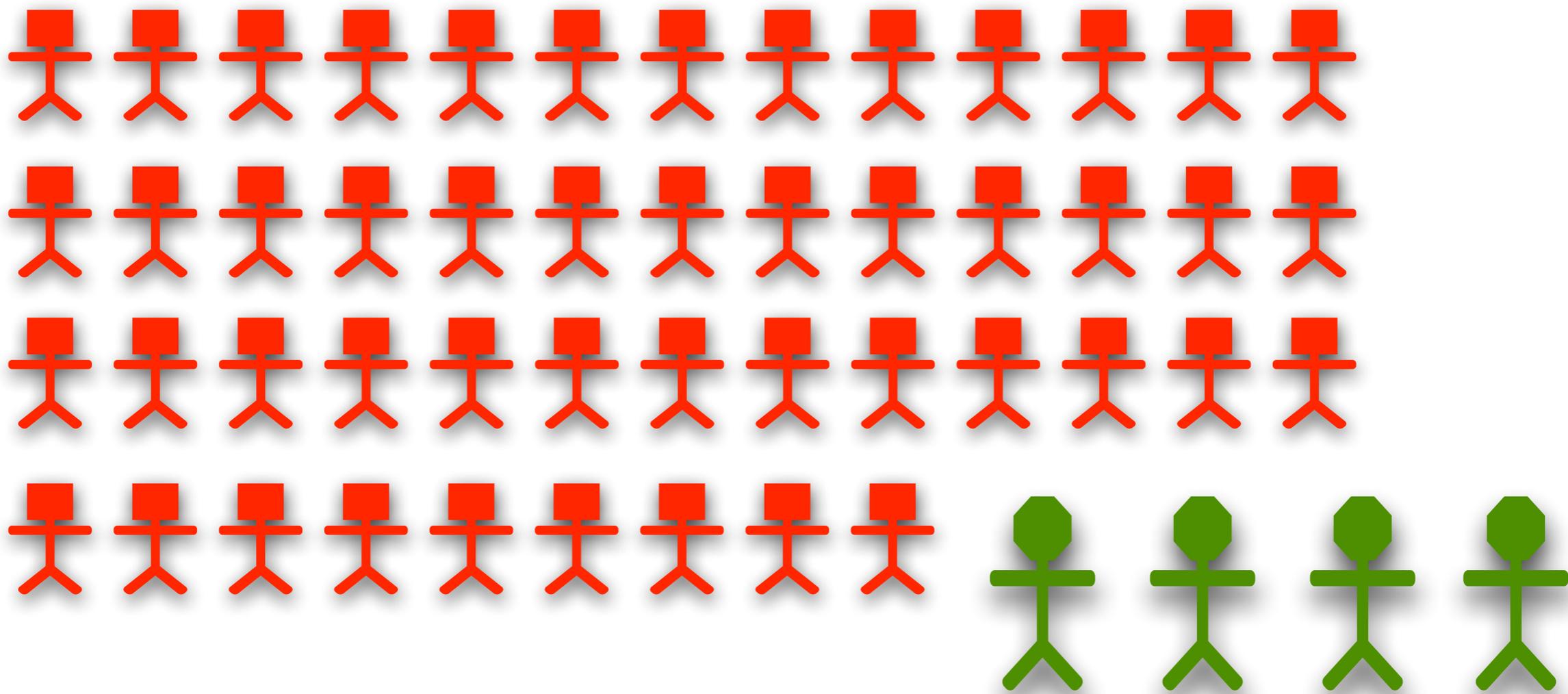
FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO	FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO	FAVORITE SAN FRANCISCO ATTRACTION ATRACCIÓN FAVORITA DE SAN FRANCISCO
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Do not mark the same candidate more than once. Your vote for that candidate will count only one time.

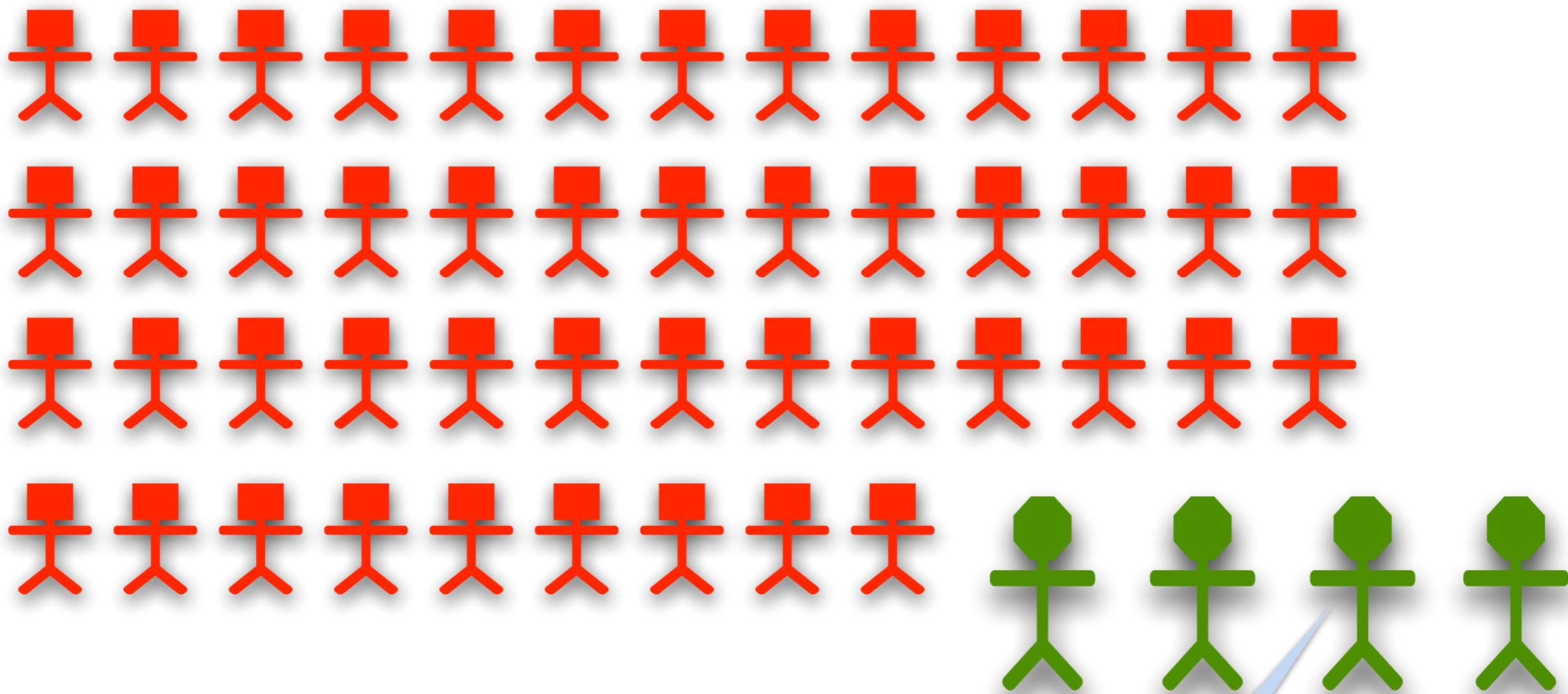
# How RCV works



n=52



n=52



n=52

Joe

# What we found

# Mental models

People make inferences about how things work based on available information and context

# Mental models

## Election

Vote for one

- Bob Smith
- Mary Rose
- Ken Sterner
- Harry Herbert
- Michael Cowan

# Mental models

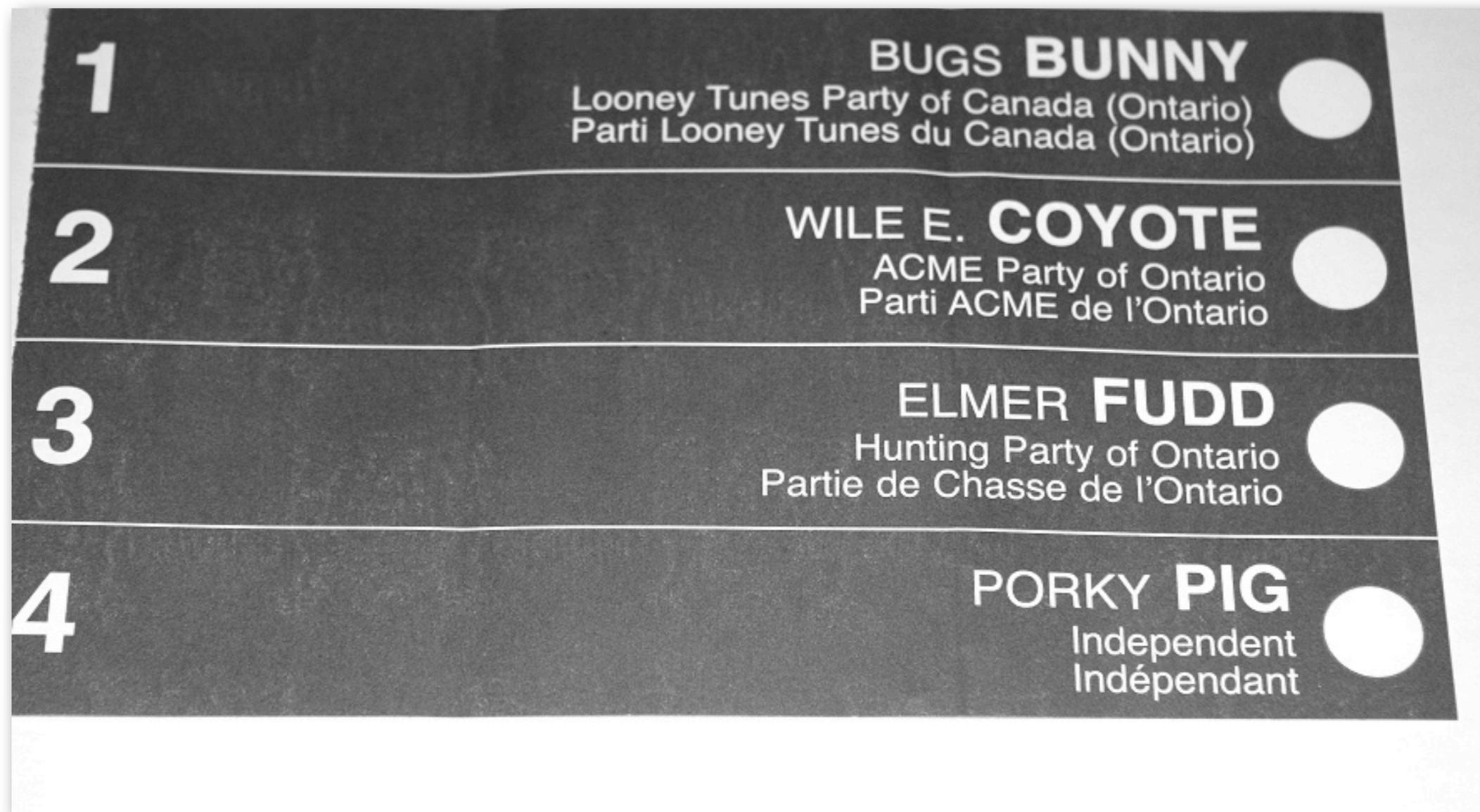
## Election

Vote for one

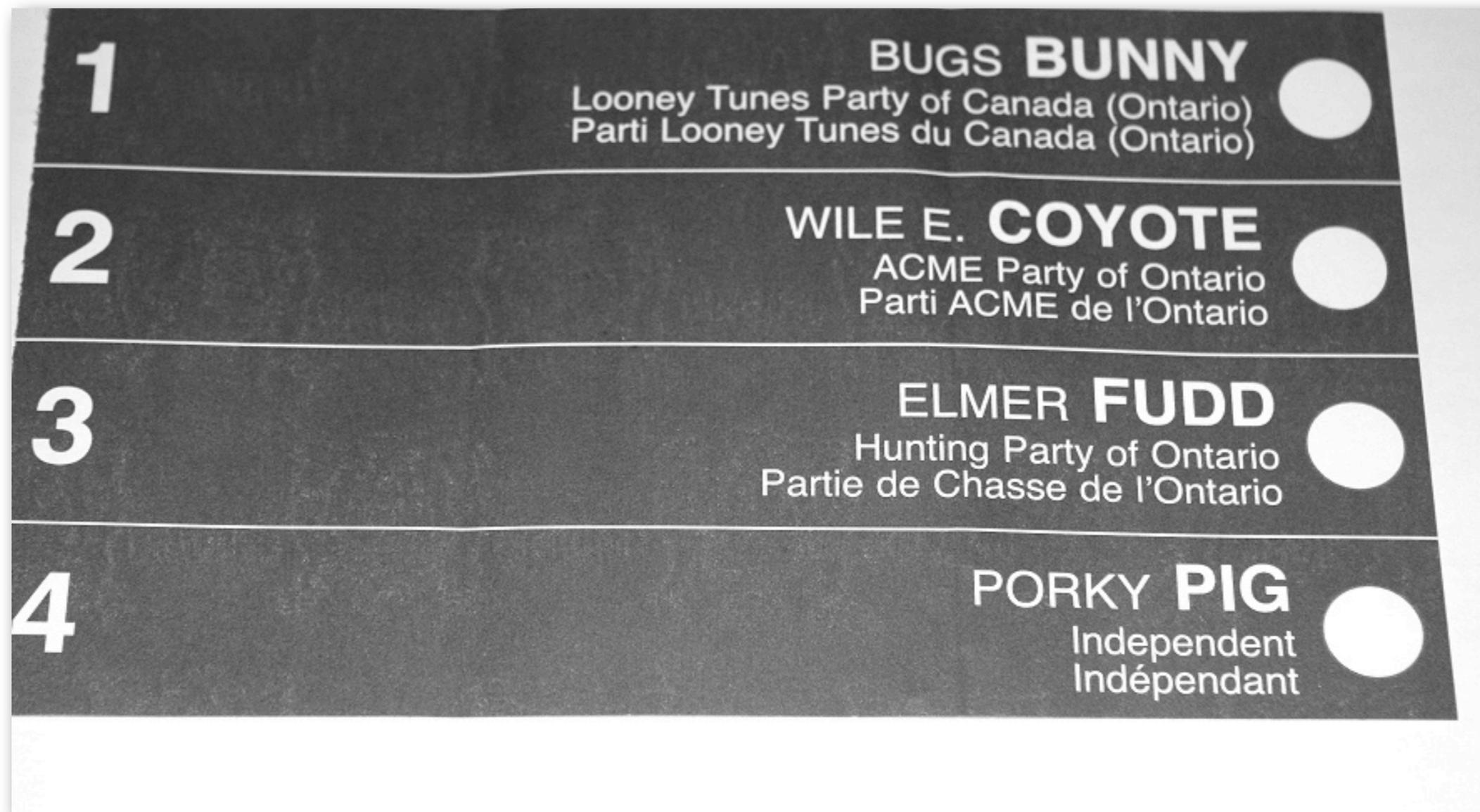
- Bob Smith
- Mary Rose
- Ken Sterner
- Harry Herbert
- Michael Cowan

**This is what we  
teach people**

# Mental models

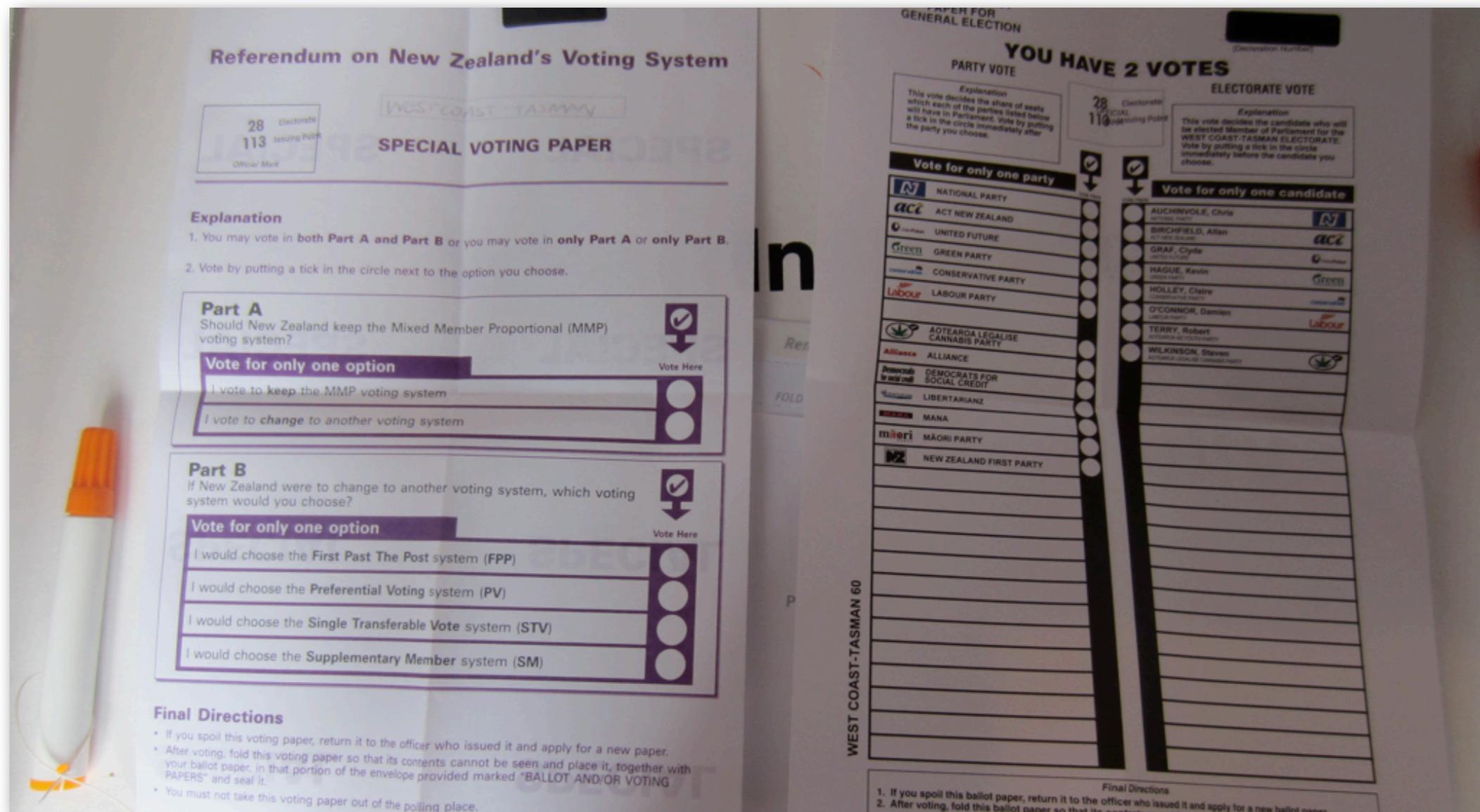


# Mental models



Sometimes it really is this simple -  
but not in the US

# Mental models



Sometimes it really is this simple -  
but not in the US

# PECAN BANK

LOAN OFFICER Joe Smith  
 PHONE 555-123-4444  
 EMAIL joesmith@pecanbank.com  
 NMLS ID# 01234567

LOAN ID# 1330172608  
 APPLICANT Jane Johnson  
 PROPERTY 456 Avenue A, Anytown, ST 12345  
 LOAN TYPE 30 year adjustable rate  
 PURPOSE Purchase  
 PROGRAM Conventional  
 DATE May 18, 2011  
 EXPIRES June 2, 2011 at 3:00 PM

## Loan Estimate

### PROJECTED PAYMENTS Payments you should expect to make.

AT CLOSING	YEARS 1 - 2	YEARS 3 - 8	YEARS 9 - 30
<b>\$34,060</b> estimated Will be adjusted for credits and deposits.	<b>\$853</b> a month + <b>\$427</b> estimated taxes and insurance. Estimated total <b>\$1,280</b> a month.	As much as <b>\$1,810</b> a month + <b>\$427</b> estimated taxes and insurance. Estimated total <b>\$1,280 to \$2,237</b> a month.	As much as <b>\$1,810</b> a month + <b>\$317</b> estimated taxes and insurance. Estimated total <b>\$1,170 to \$2,127</b> a month.

### SUMMARY

Loan Amount	<b>\$216,000</b>
Monthly Loan Payment	<b>\$853.47</b> • Adjusts yearly starting in year 3.
Monthly Taxes & Insurance	<b>\$427</b> • Estimated. Could increase over time.
Interest Rate	<b>2.5% to start</b> • Adjusts yearly starting in year 3. • See details on back.
Closing Costs You Pay	<b>\$10,060</b> • See details on back.
Down Payment	<b>\$24,000</b>

### CAUTIONS

These features trigger higher or additional payments.  
 Adjustable Interest Rate..... **As high as 10%**  
 Increasing Monthly Payment... **As high as \$1,810**  
 Increasing Loan Amount..... **No**  
 Balloon Payment..... **No**  
 Prepayment Penalty..... **No**

### COMPARISONS

Use these additional measures to compare this loan with others.  
 In 5 Years ..... **\$79,993**  
 Amount you have paid  
**\$19,761**  
 Amount of loan paid off  
 APR..... **5.59%**  
 • Expresses interest and costs over 30 years.

## Loan Estimate Details

You have no obligation to choose this loan. Shop around to find the best loan for you.

LOAN ID # 1330172608

### Estimated Closing Costs

A	Origination Fee.	This fee cannot change. Includes <u>0</u> points (\$0)	\$2,000
B	Required services and costs you cannot shop for.	Services Required by the Lender • These services include appraisal (\$300) and credit report (\$18) provided by lender-related companies: PGV Appraisers and KJT Credit Co. • Total cannot be higher than <b>\$953</b> at closing.	\$866
		Government Charges	\$2,015
C	Required services you can shop for. If you choose another provider, these amounts may vary.	Title Services, Lender's Title Insurance, and Settlement Agent	\$1,745
		Pest Inspection	\$90
		Homeowner's Insurance	\$637
D	Non-required services. You choose to shop for and purchase these services.	Owner's Title Insurance	\$650
		Home Warranty	\$550
E	Advance charges you pay at closing.	Escrow and prepaid property taxes and assessments	\$633
		Escrow for insurance	\$649
		Prepaid Interest (15 days @ 2.5%, \$15/day)	\$225
F	Total Closing Costs	A + B + C + D + E	\$10,060
G	Credits from Lender or Seller		\$0
H	Amount of Total Closing Costs to be Financed		\$0
I	ESTIMATED AMOUNT YOU WILL PAY AT CLOSING (F - G - H)		\$10,060

### Is an Escrow Account Required?

- YES, your monthly payment includes monthly taxes and insurance.  
 NO, you must pay your taxes and insurance yourself.

### Is Mortgage Insurance Required?

- YES, this loan requires mortgage insurance.  
 NO, this loan does not require mortgage insurance.

### Will You Make Your Payments to Us?

- YES, we intend to service your loan.  
 NO, we intend to assign, sell, or transfer servicing of your loan.

### Appraisal

We will promptly give you a free copy of any written property appraisals or valuations. You will receive the copy even if the loan does not close.

### Important Dates

This estimate expires on **06/02/2011 at 3:00 PM**. After this time, the loan features and closing costs on this form may not be available.

### Adjustable Interest Rate Information

Index	Prime
Margin	2.5%
Lifetime Maximum Rate	10%
Lifetime Minimum Rate	2.5%

### Cap on Interest Rate Changes

At First Change	3%
At Subsequent Changes	3%

### Change Frequency

First Change:	2 years from loan date
Subsequent Changes:	Every year after first change

# PECAN BANK

LOAN OFFICER Joe Smith  
 PHONE 555-123-4444  
 EMAIL joesmith@pecanbank.com  
 NMLS ID# 01234567

LOAN ID# 1330172608  
 APPLICANT Jane Johnson  
 PROPERTY 456 Avenue A, Anytown, ST 12345  
 LOAN TYPE 30 year adjustable rate  
 PURPOSE Purchase  
 PROGRAM Conventional  
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 EXPIRES June 2, 2011 at 3:00 PM

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G	Credits from Lender or Seller		\$0
H	Amount of Total Closing Costs to be Financed		\$0
I	<b>ESTIMATED AMOUNT YOU WILL PAY AT CLOSING (F - G - H)</b>		\$10,060

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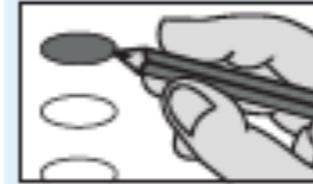
Much more like signing for a mortgage

# This is the ballot we test

NIST medium complexity ballot

**Instructions**

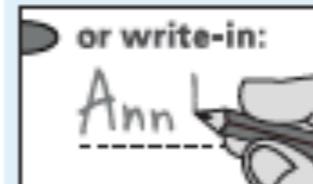
**Making selections**



Fill in the oval to the left of the name of your choice. You must blacken the oval completely and do not make any marks outside of the oval. You do not have to vote in every race.

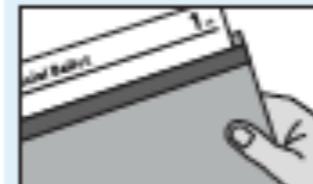
**i** Do not cross out or erase, or your vote may not count. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.

**Optional write-in**



To add a candidate, fill in the oval to the left of "or write-in" and print the name clearly on the dotted line.

**Turning in the ballot**



Insert the completed ballot into the ballot sleeve. Hand in the ballot to be counted.

**i** Do not fold the ballot.

**President and Vice President of the United States**

**Vote for 1 pair**

- John F. Kerry and John Edwards Democrat
- George W. Bush and Dick Cheney Republican
- Michael Badnarik and Richard Campagna Libertarian
- Ralph Nader and Peter Miguel Camejo Independent
- or write-in: \_\_\_\_\_

**U.S. Senator**

**Vote for 1**

- Dennis Weirford Democrat
- Lloyd Garrison Republican
- Sylvia Wentworth-Farthington Libertarian
- John Hewetson Independent
- or write-in: \_\_\_\_\_

**U.S. Representative**

**Vote for 1**

- Brad Plunkard Democrat
- Bruce Reeder Republican
- Brad Schott Libertarian
- or write-in: \_\_\_\_\_

**County Commissioners**

**i Vote for up to 2**

- Camille Argent Democrat
- Chloe Witherspoon Republican
- Amanda Marracini Libertarian
- or write-in: \_\_\_\_\_
- or write-in: \_\_\_\_\_

**Judge Retention: State Supreme Court**

**Vote yes or no**

Keep Robert Demergue as Chief Justice of the State Supreme Court?

- Yes
- No

**Ballot Measure 113: Financing for Mass Transit**

**Vote yes or no**

Shall regional mass transit taxes be increased \$158.34 million each year by increasing sales tax?  
Shall regional transportation district taxes be increased \$158.34 million annually and by whatever additional amounts

# Mental models

# Mental models

**Point system**

# Mental models

**Point system**

**Weighted**

# Mental models

**Point system**

**Weighted**

**Reversed**

**INSTRUCTIONS TO VOTERS: USE BLACK OR BLUE BALLPOINT PEN ONLY.** To vote for a candidate of your choice,

complete the arrow  to the right of the candidate's name. To vote for a qualified write-in candidate, PRINT the person's name in the blank space provided and complete the arrow.

PARTISAN OFFICES		INSURANCE COMMISSIONERS		STATE SENATOR	
<b>STATE</b>		Vote for no more than Five		Vote for One	
<b>GOVERNOR</b> Vote for One		CAMILLE ARGENT	ORANGE	EDWARD SHIPLETT	ORANGE
CHARLENE FRANZ	ORANGE	CHLOE WITHERSPOON	ORANGE	MARTY TALARICO	YELLOW
GERARD HARRIS	YELLOW	VALARIE ALTMAN	ORANGE	ANDREA SOLIS	PURPLE
LINDA BARGMANN	TAN	CHARLENE HENNESSEY	YELLOW	AMOS KELLER	LIME
BARBARA ADCKOCK	GOLD	SHEILA MOSKOWITZ	TAN		
DOUGLAS ALPERN	INDEPENDENT	MARY TAWA	PURPLE	<b>MEMBER OF THE STATE ASSEMBLY</b>	
FREDERICK SHARP	PURPLE	DAMIAN RANGEL	PURPLE	<b>STATE ASSEMBLYMAN</b> Vote for One	
ALEX WALLACE	LIME	HELEN MOORE	LIME	ANDREA SOLIS	ORANGE
BARBARA WILLIAMS	AQUA	JOHN WHITE	LIME	AMOS KELLER	YELLOW
ALTHEA SHARP	SILVER	JOE LEE	AQUA	EDWARD SHIPLETT	PURPLE
ANN WINDBECK	INDEPENDENT	JOE BARRY	AQUA	MARTY TALARICO	LIME
		MARTIN SCHREINER	AQUA		
		ERIC SAVOY	SILVER		
<b>LIEUTENANT GOVERNOR</b> Vote for One					
CHRIS NORBERG	ORANGE				
ANTHONY PARKS	YELLOW				
LUIS GARCIA	TAN				
CHARLES QAULEY	PURPLE				
GEORGE HOVIS	LIME				
BURT ZIRKLE	AQUA				
<b>ATTORNEY GENERAL</b> Vote for One		<b>UNITED STATES SENATOR</b>			
LAILA SHAMSI	YELLOW	US SENATE Vote for One			
LILLIAN COHEN	LIME	DENNIS WEIFORD	ORANGE		
		LLOYD GARRISS	YELLOW		
		SYLVIA WENTWORTH-FARTINGTON	TAN		
		VICTOR MARTINEZ	PURPLE		
		DAVID PLATT	LIME		
		HEATHER PORTIER	AQUA		
		<b>UNITED STATES REPRESENTATIVE</b>			
		US REPRESENTATIVE Vote for One			
		BRAD PLUNKARD	ORANGE		
		BRUCE REEDER	YELLOW		
		GLEN TAWNEY	PURPLE		
		CARROLL FORREST	LIME		

person's name in the blank space provided and complete the arrow. You may rank up to three choices. Vote across in each race.

- 1 Mark your first choice in Column 1.
- 2 Mark your second choice in Column 2. This choice must be different from your first choice.
- 3 Mark your third choice in Column 3. This choice must be different from your first and second choices.

NONPARTISAN FOR MAYOR		NONPARTISAN FOR MAYOR		NONPARTISAN FOR MAYOR	
<b>1 FIRST CHOICE</b> Vote for One		<b>2 SECOND CHOICE</b> (This must be different from your first choice.) Vote for One		<b>3 THIRD CHOICE</b> (This must be different from your first and second choices.) Vote for One	
MICHAEL MARCHESANI		MICHAEL MARCHESANI		MICHAEL MARCHESANI	
KENNETH MITHCELL		KENNETH MITHCELL		KENNETH MITHCELL	
ORVILLE WHITE		ORVILLE WHITE		ORVILLE WHITE	
GREGORY SELDON		GREGORY SELDON		GREGORY SELDON	
HARVEY EAGLE		HARVEY EAGLE		HARVEY EAGLE	
RANDALL RUPP		RANDALL RUPP		RANDALL RUPP	
<b>FOR DISTRICT ATTORNEY</b>		<b>FOR DISTRICT ATTORNEY</b>		<b>FOR DISTRICT ATTORNEY</b>	
<b>1 FIRST CHOICE</b> Vote for One		<b>2 SECOND CHOICE</b> (This must be different from your first choice.) Vote for One		<b>3 THIRD CHOICE</b> (This must be different from your first and second choices.) Vote for One	
ANNA MAE SILVER		ANNA MAE SILVER		ANNA MAE SILVER	
ROBERT DEMERGUE		ROBERT DEMERGUE		ROBERT DEMERGUE	
ESTER YORK		ESTER YORK		ESTER YORK	
ELMER HULL		ELMER HULL		ELMER HULL	
HARVEY SMITH		HARVEY SMITH		HARVEY SMITH	
CARROLL BARKER		CARROLL BARKER		CARROLL BARKER	
<b>FOR ASSESSOR</b>		<b>FOR ASSESSOR</b>		<b>FOR ASSESSOR</b>	
<b>1 FIRST CHOICE</b> Vote for One		<b>2 SECOND CHOICE</b> (This must be different from your first choice.) Vote for One		<b>3 THIRD CHOICE</b> (This must be different from your first and second choices.) Vote for One	
CARROLL SHRY		CARROLL SHRY		CARROLL SHRY	
BEVERLY BARKER		BEVERLY BARKER		BEVERLY BARKER	
DONALD DAVIS		DONALD DAVIS		DONALD DAVIS	
HUGH SMITH		HUGH SMITH		HUGH SMITH	
REID FEISTER		REID FEISTER		REID FEISTER	
BEVERLY SHRY		BEVERLY SHRY		BEVERLY SHRY	
DONALD RUPP		DONALD RUPP		DONALD RUPP	
HUGH FEISTER		HUGH FEISTER		HUGH FEISTER	
JANET STERNER		JANET STERNER		JANET STERNER	
CAROL SIONKOWSKI		CAROL SIONKOWSKI		CAROL SIONKOWSKI	
DON CALVERT		DON CALVERT		DON CALVERT	
MICHAEL SPOOL		MICHAEL SPOOL		MICHAEL SPOOL	

# Alameda Co. demo ballot



# Point / weight system

NONPARTISAN FOR MAYOR		NONPARTISAN FOR MAYOR		NONPARTISAN FOR MAYOR	
<b>1</b>	<b>FIRST CHOICE</b> <i>Vote for One</i>	<b>2</b>	<b>SECOND CHOICE</b> <i>(This must be different from your first choice.)</i> <i>Vote for One</i>	<b>3</b>	<b>THIRD CHOICE</b> <i>(This must be different from your first and second choices.)</i> <i>Vote for One</i>
	MICHAEL MARCHESANI		MICHAEL MARCHESANI		MICHAEL MARCHESANI
	KENNETH MITHCELL		KENNETH MITHCELL		KENNETH MITHCELL
	ORVILLE WHITE		ORVILLE WHITE		ORVILLE WHITE
	GREGORY SELDON		GREGORY SELDON		GREGORY SELDON
	HARVEY EAGLE		HARVEY EAGLE		HARVEY EAGLE
	RANDALL RUPP		RANDALL RUPP		RANDALL RUPP

# Point / weight system

NONPARTISAN FOR MAYOR	
<b>1</b>	[REDACTED]
Vote for One	
MICHAEL MARCHESANI	←
KENNETH MITHCELL	←
ORVILLE WHITE	←
GREGORY SELDON	←
HARVEY EAGLE	←
RANDALL RUPP	←
	←

NONPARTISAN FOR MAYOR	
<b>2</b>	[REDACTED]
Vote for One	
MICHAEL MARCHESANI	←
KENNETH MITHCELL	←
ORVILLE WHITE	←
GREGORY SELDON	←
HARVEY EAGLE	←
RANDALL RUPP	←
	←

NONPARTISAN FOR MAYOR	
<b>3</b>	[REDACTED]
Vote for One	
MICHAEL MARCHESANI	←
KENNETH MITHCELL	←
ORVILLE WHITE	←
GREGORY SELDON	←
HARVEY EAGLE	←
RANDALL RUPP	←
	←

# Point / weight system

NONPARTISAN FOR MAYOR		NONPARTISAN FOR MAYOR		NONPARTISAN FOR MAYOR	
<b>1</b>	[REDACTED]	<b>2</b>	[REDACTED]	<b>3</b>	[REDACTED]
Vote for One		Vote for One		Vote for One	
MICHAEL MARCHESANI	←	MICHAEL MARCHESANI	←	MICHAEL MARCHESANI	←
KENNETH MITHCELL	←	KENNETH MITHCELL	←	KENNETH MITHCELL	←
ORVILLE WHITE	←	ORVILLE WHITE	←	ORVILLE WHITE	←
GREGORY SELDON	←	GREGORY SELDON	←	GREGORY SELDON	←
HARVEY EAGLE	←	HARVEY EAGLE	←	HARVEY EAGLE	←
RANDALL RUPP	←	RANDALL RUPP	←	RANDALL RUPP	←
	←		←		←

**1. Voters develop faulty  
mental models**

**2. Voters don't understand the consequences of their actions**

### **3. Voters vote counter to their intentions**

**Official Ballot  
General Municipal Election  
Portland, Maine  
Peaks Island  
November 8, 2011**

*Katherine L. Jones*  
CITY CLERK

**INSTRUCTIONS TO VOTERS**

- A. To vote, complete the oval(s)  next to your choice(s), like this:
- B. Follow directions as to the number of candidates to be voted for each office.
- C. To vote for a write-in candidate, write the person's name in the write-in space and fill in the oval next to the name.
- D. If you make a mistake, do not erase; ask for a new ballot.

<p align="center"><b>School Board At Large</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> <b>Holton, Elizabeth H.</b> 18 Victoria Street</p> <p><input type="radio"/> <b>Okot, Josephine A.</b> 34 Dartmouth Street #4</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Peaks Island Council</b></p> <p align="center">Three Year Term      Vote For Two</p> <p><input type="radio"/> _____ Write-in</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Casco Bay Lines Director Great Diamond Island</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> <b>Hoffner, Kathleen B.</b> 30 Pleasant Cove Lane</p> <p><input type="radio"/> <b>Robinson, Roger E.</b> 159 Crescent Avenue</p> <p><input type="radio"/> _____ Write-in</p>
<p align="center"><b>Portland Water District Trustee</b></p> <p align="center">Five Year Term      Vote For One</p> <p><input type="radio"/> <b>Cleaves, Bradford S.</b> 122 Salem Street</p> <p><input type="radio"/> <b>Safarik, John W.</b> 24 Ivy Street</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Peaks Island Council</b></p> <p align="center">One Year Term      Vote For Two</p> <p><input type="radio"/> <b>Mitchell, Mary Anne</b> 31 Sterling Street</p> <p><input type="radio"/> _____ Write-in</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Casco Bay Lines Director Little Diamond Island</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> _____ Write-in</p>
	<p align="center"><b>Peaks Island Council</b></p> <p align="center">Two Year Term      Vote For One</p> <p><input type="radio"/> _____ Write-in</p>	<p align="center"><b>Casco Bay Lines Director Peaks Island</b></p> <p align="center">Three Year Term      Vote For One</p> <p><input type="radio"/> <b>Flynn, Patrick T.</b> 13 Centennial Street</p> <p><input type="radio"/> _____ Write-in</p>

PLEASE CONTINUE VOTING ON OTHER SIDE

**Official Ballot  
General Municipal Election  
Portland, Maine  
November 8, 2011**

- A. To vote, complete the oval(s)  next to your choice(s), like this:
- B. Follow the special instructions for the mayoral election.
- C. To vote for a write-in candidate, write the person's name in the write-in space and fill in the oval next to the name.
- D. If you make a mistake, do not erase; ask for a new ballot.

**For MAYOR  
Four-Year Term**

Rank candidates in order of your choice)

	1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice	6th Choice	7th Choice	8th Choice	9th Choice	10th Choice	11th Choice	12th Choice	13th Choice	14th Choice	15th Choice
<b>Dragdon, Charles E.</b> Munjoy South	<input type="radio"/>														
<b>Irennan, Michael F.</b> Wellington Road	<input type="radio"/>														
<b>Iryant, Peter G.</b> Back Cove Estates #18	<input type="radio"/>														
<b>Marmona, Ralph C.</b> 15 North Street #1	<input type="radio"/>														
<b>Rodge, Richard A.</b> 281 Forest Avenue	<input type="radio"/>														
<b>Ruson, Jill C.</b> 11 Pennell Avenue	<input type="radio"/>														
<b>Sander, John M.</b> 11 Gray Street	<input type="radio"/>														
<b>Laadoow, Hamza A.</b> Coast Lane	<input type="radio"/>														
<b>Apchick, Jodie L.</b> Cushman Street	<input type="radio"/>														
<b>Marshall, David A.</b> Pine Street	<input type="radio"/>														
<b>Lavodones, Nicholas M. Jr.</b> Chenery Street	<input type="radio"/>														
<b>Liller, Markos S.</b> Atlantic Street	<input type="radio"/>														
<b>Lathband, Jed</b> Everett Street	<input type="radio"/>														
<b>Trimling, Ethan K.</b> 1 Spring Street	<input type="radio"/>														
<b>Sail, Christopher L.</b> 19 Washington Avenue	<input type="radio"/>														
Write-in	<input type="radio"/>														

No more than one oval per column No more than one oval per candidate

PLEASE CONTINUE VOTING ON OTHER SIDE

- Special Instructions: Rank Mayor in order of Choice
- Fill in the oval to the choice
  - Select a 2nd choice, choice oval to the right
  - Continue until you have your choices
  - You may rank as many as you wish
  - Fill in no more than one candidate
  - Fill in no more than one column.

**Portland, Maine 2011**

**Official Ballot  
General Municipal Election  
Portland, Maine  
November 8, 2011**

- A. To vote, complete the oval(s)  next to your choice(s), like this:
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- C. To vote for a write-in candidate, write the person's name in the write-in space and fill in the oval next to the name.
- D. If you make a mistake, do not erase; ask for a new ballot.

**For MAYOR**  
Four-Year Term

(Rank candidates in order of your choice)

	1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice	6th Choice	7th Choice	8th Choice	9th Choice	10th Choice	11th Choice	12th Choice	13th Choice	14th Choice	15th Choice
<b>Bragdon, Charles E.</b> 31 Munjoy South	<input type="radio"/>														
<b>Brennan, Michael F.</b> 49 Wellington Road	<input type="radio"/>														
<b>Bryant, Peter G.</b> 18 Back Cove Estates #18	<input type="radio"/>														
<b>Carmona, Ralph C.</b> 105 North Street #1	<input type="radio"/>														
<b>Dodge, Richard A.</b> 1281 Forest Avenue	<input type="radio"/>														
<b>Duson, Jill C.</b> 101 Pennell Avenue	<input type="radio"/>														
<b>Eder, John M.</b> 101 Gray Street	<input type="radio"/>														
<b>Haadoow, Hamza A.</b> 1 Coast Lane	<input type="radio"/>														
<b>Lapchick, Jodie L.</b> 7 Cushman Street	<input type="radio"/>														
<b>Marshall, David A.</b> 41 Pine Street	<input type="radio"/>														
<b>Mavodones, Nicholas M. Jr.</b> 79 Chenery Street	<input type="radio"/>														
<b>Miller, Markos S.</b> 17 Atlantic Street	<input type="radio"/>														
<b>Rathband, Jed</b> 9 Everett Street	<input type="radio"/>														
<b>Strimling, Ethan K.</b> 211 Spring Street	<input type="radio"/>														
<b>Vail, Christopher L.</b> 1119 Washington Avenue	<input type="radio"/>														
Write-in	<input type="radio"/>														

Special Instructions: Rank Candidates for Mayor in order of Choice.

- Fill in the oval to the right of your 1st choice
- Select a 2nd choice, fill in the 2nd choice oval to the right of candidate
- Continue until you have ranked all your choices
- You may rank as many or as few as you wish
- Fill in no more than one oval per candidate
- Fill in no more than one oval per column.

No more than one oval per column No more than one oval per candidate

**PLEASE CONTINUE VOTING ON OTHER SIDE**

**Official Ballot  
General Municipal Election  
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Four-Year Term

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<b>Dodge, Richard A.</b> 1281 Forest Avenue	<input type="radio"/>														
<b>Duson, Jill C.</b> 101 Pennell Avenue	<input type="radio"/>														
<b>Eder, John M.</b> 101 Gray Street	<input type="radio"/>														
<b>Haadoow, Hamza A.</b> 1 Coast Lane	<input type="radio"/>														
<b>Lapchick, Jodie L.</b> 7 Cushman Street	<input type="radio"/>														
<b>Marshall, David A.</b> 41 Pine Street	<input type="radio"/>														
<b>Mavodones, Nicholas M. Jr.</b> 79 Chenery Street	<input type="radio"/>														
<b>Miller, Markos S.</b> 17 Atlantic Street	<input type="radio"/>														
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No more than one oval per column No more than one oval per candidate

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**For MAYOR**  
Four-Year Term

(Rank candidates in order of your choice)

	1st Choice	2nd Choice	3rd Choice	4th Choice	5th Choice	6th Choice	7th Choice	8th Choice	9th Choice	10th Choice	11th Choice	12th Choice	13th Choice	14th Choice	15th Choice
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Write-in	<input type="radio"/>														

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- Fill in no more than one oval per column.

No more than one oval per column No more than one oval per candidate

**PLEASE CONTINUE VOTING ON OTHER SIDE**



Top 2 primary

Top 2 primary  
+ regular contests

Top 2 primary  
+ regular contests  
+ RCV

Top 2 primary  
+ regular contests  
+ RCV  
+ multi-candidate

Top 2 primary  
+ regular contests  
+ RCV  
+ multi-candidate  
+ retention contests

Top 2 primary  
+ regular contests  
+ RCV  
+ multi-candidate  
+ retention contests  
+ measures

Top 2 primary  
+ regular contests  
+ RCV  
+ multi-candidate  
+ retention contests  
+ measures

---

**6 different models**

We're pretty sure there's a **problem**

# Implications and outcomes

**Poor design and instructions  
on ballots make**  
understanding, marking, and casting  
**difficult, time-consuming, and  
complicated**

**Poor design and instructions  
on ballots make  
counting, verifying, and audits  
difficult, time-consuming, and  
complicated**

**Raises questions about what is being secured.**

RCV = lost votes

RCV + VBM = lost votes

RCV + multi-language = lost votes



RCV

RCV  
+ VBM

RCV  
+ VBM  
+ multi-language

RCV  
+ VBM  
+ multi-language

= thousands of  
lost votes



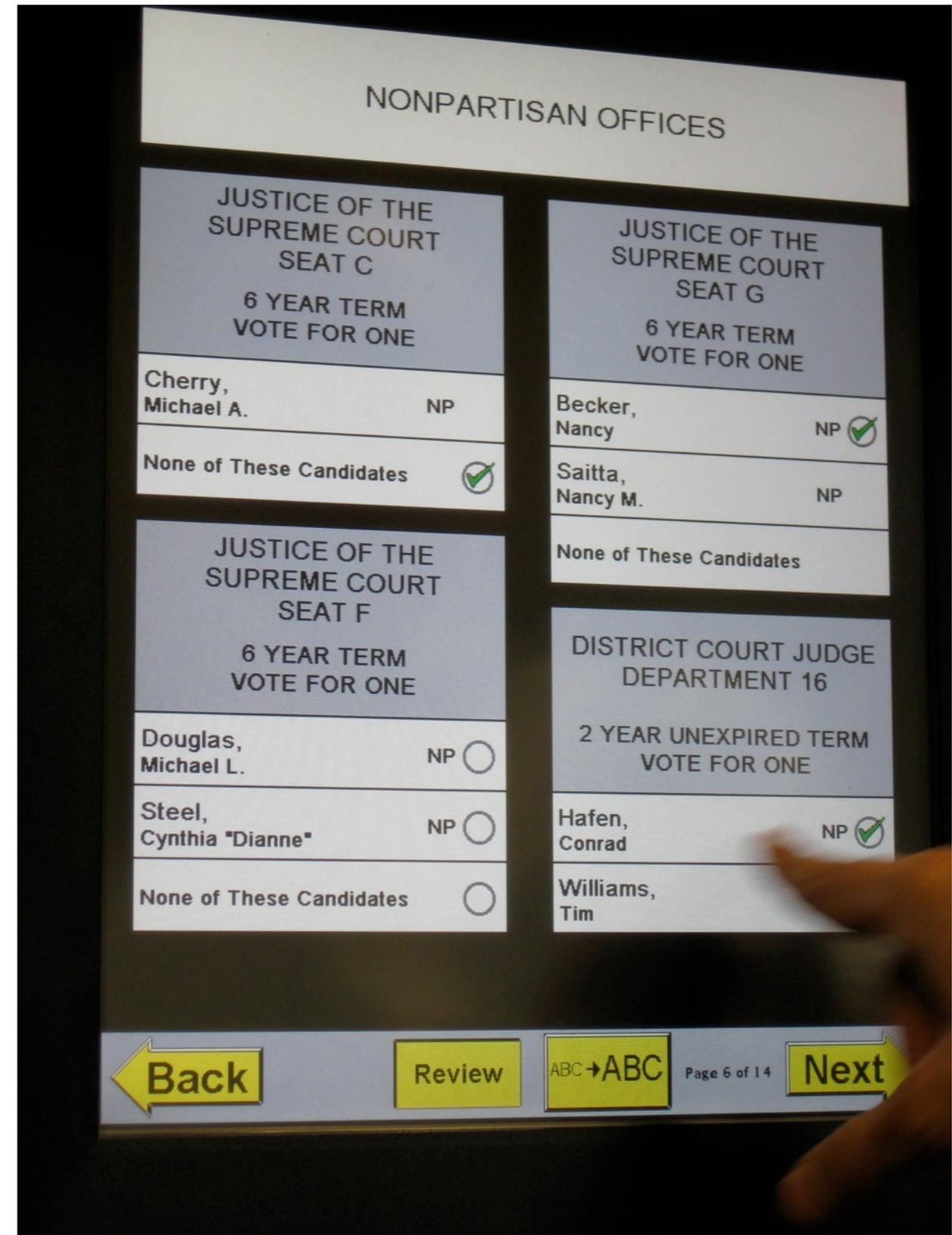
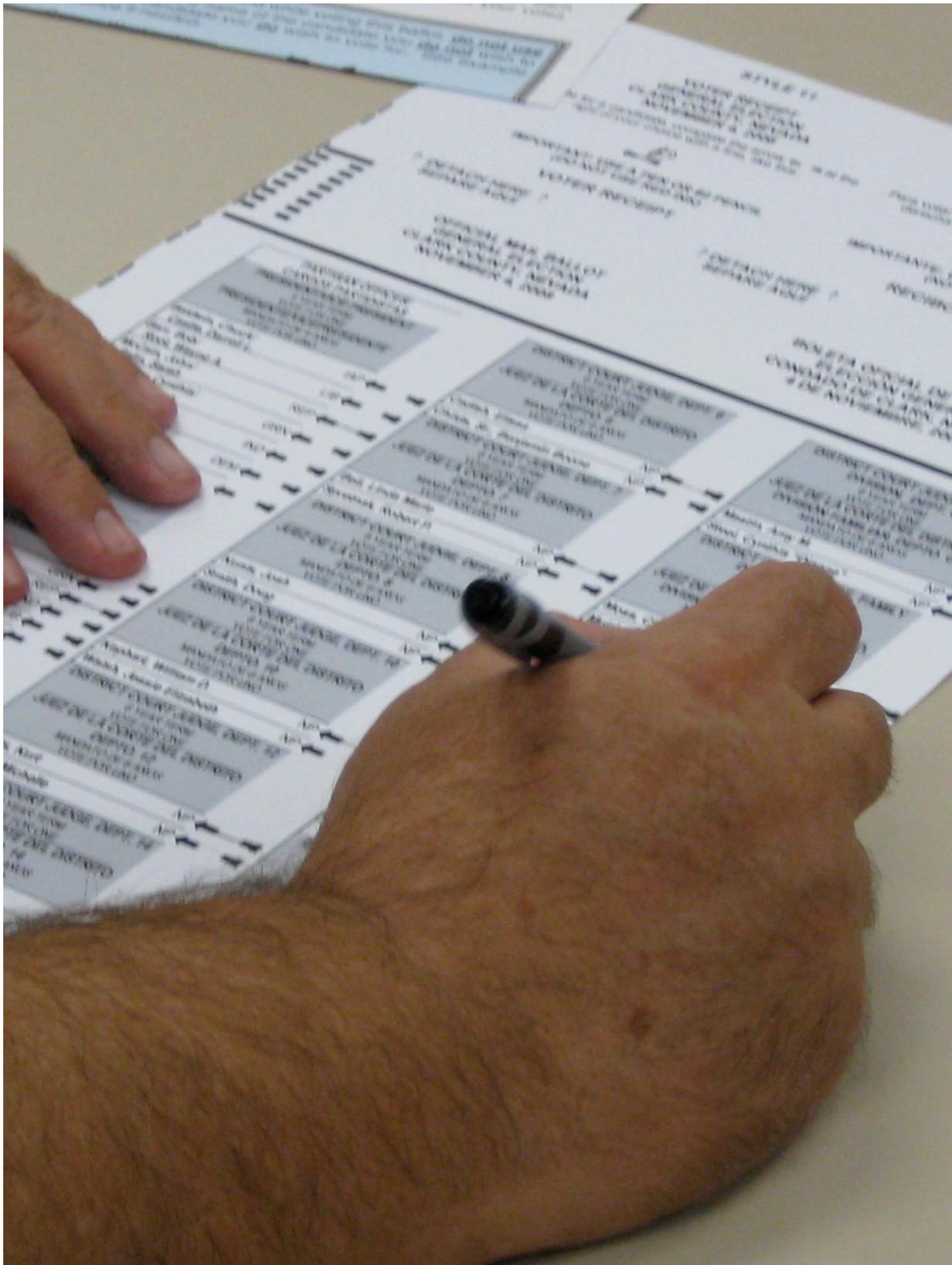
- Lack of trust in elections
- Lack of trust in officials
- Recalls
- Scrambling county boards



Security = Counted as cast

Security = Cast as intended +  
counted as cast

# This moment



Voter ed is not the answer.

# Next steps

# Next steps

- Develop & test versions of **on-ballot** instructions

# Next steps

- Develop & test versions of **on-ballot** instructions
- Develop & test versions of **pre-voting** instructions

# Next steps

- Develop & test versions of **on-ballot** instructions
- Develop & test versions of **pre-voting** instructions
- Study combinations of designs with instructions

# Next steps

- Develop & test versions of **on-ballot** instructions
- Develop & test versions of **pre-voting** instructions
- Study combinations of designs with instructions
- Study combinations of voting modes on the same ballot

## SPECIAL INSTRUCTIONS - INSTANT RUNOFF VOTING:

- a. Choose up to 3 candidates for the following office in order of your preference: 1st, 2nd, 3rd.
- b. Select a different candidate for each choice.
- c. Your 2nd and 3rd choices will not count against your 1st choice; they will only be considered in a runoff if your 1st choice is not in the runoff.

### Court of Appeals Judge

Fill in only one oval per choice	Your 2nd and 3rd choices will not count against your 1st choice They will only be considered in a runoff if your 1st choice is not in the runoff	
<b>1st</b>  Mark your 1st choice here	<b>2nd</b>  Mark your 2nd choice here	<b>3rd</b>  Mark your 3rd choice here
<input type="radio"/> John F. Bloss	<input type="radio"/> John F. Bloss	<input type="radio"/> John F. Bloss
<input type="radio"/> J. Wesley Casteen	<input type="radio"/> J. Wesley Casteen	<input type="radio"/> J. Wesley Casteen
<input type="radio"/> Chris Dillon	<input type="radio"/> Chris Dillon	<input type="radio"/> Chris Dillon
<input type="radio"/> Jewel Ann Farlow	<input type="radio"/> Jewel Ann Farlow	<input type="radio"/> Jewel Ann Farlow
<input type="radio"/> Daniel E. Garner	<input type="radio"/> Daniel E. Garner	<input type="radio"/> Daniel E. Garner
<input type="radio"/> Stan Hammer	<input type="radio"/> Stan Hammer	<input type="radio"/> Stan Hammer
<input type="radio"/> Mark E. Klass	<input type="radio"/> Mark E. Klass	<input type="radio"/> Mark E. Klass

## SPECIAL INSTRUCTIONS - INSTANT RUNOFF VOTING:

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<b>1st</b> ↓ Mark your 1st choice here	<b>2nd</b> ↓ Mark your 2nd choice here	<b>3rd</b> ↓ Mark your 3rd choice here	
<input type="radio"/> John F. Bloss	<input type="radio"/> John F. Bloss	<input type="radio"/> John F. Bloss	
<input type="radio"/> J. Wesley Casteen	<input type="radio"/> J. Wesley Casteen	<input type="radio"/> J. Wesley Casteen	
<input type="radio"/> Chris Dillon	<input type="radio"/> Chris Dillon	<input type="radio"/> Chris Dillon	
<input type="radio"/> Jewel Ann Farlow	<input type="radio"/> Jewel Ann Farlow	<input type="radio"/> Jewel Ann Farlow	
<input type="radio"/> Daniel E. Garner	<input type="radio"/> Daniel E. Garner	<input type="radio"/> Daniel E. Garner	
<input type="radio"/> Stan Hammer	<input type="radio"/> Stan Hammer	<input type="radio"/> Stan Hammer	
<input type="radio"/> Mark E. Klass	<input type="radio"/> Mark E. Klass	<input type="radio"/> Mark E. Klass	

If it's not **usable**, it's not **valid**.

If it's not **usable**, it's not **countable**.

If it's not **usable**, it's not **verifiable**.

If it's not **usable**, it's not **auditable**.

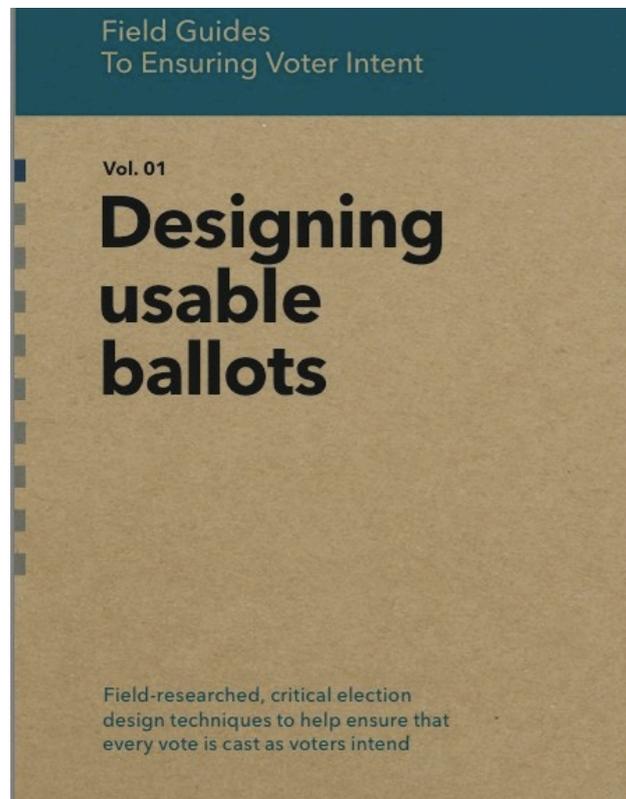
If it's not **usable**, it's not **secure**.

# Thank you

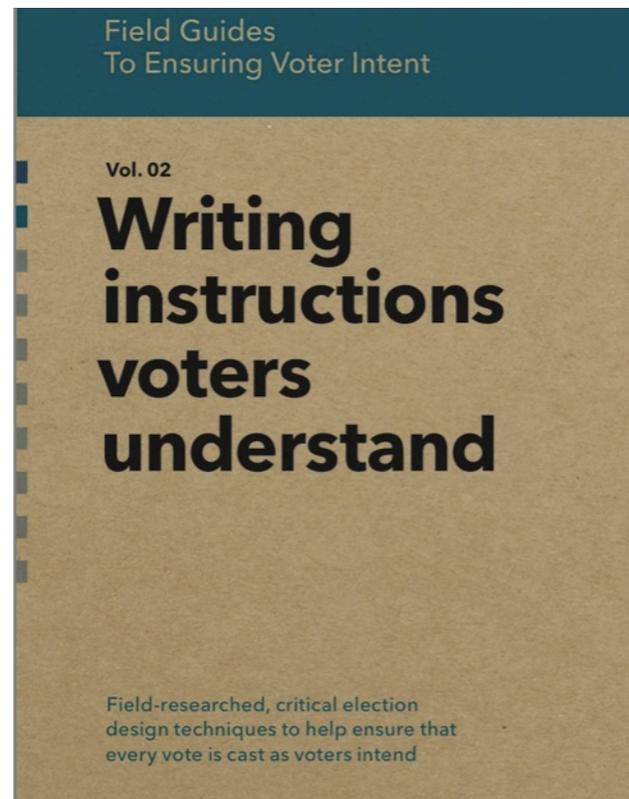
- Rick Bond
- Cyd Harrell
- Ethan Newby
- Callie Wheeler
- Chelsey Glasson
- Sara Cambridge
- Laura Paajanen
- Beth Lingard
- Beth Pickard
- Jared Spool
- David Cary
- Rebecca Sherrill
- Frank Castro
- Sandy Olson
- Nancy Frishberg
- Yelena Nakhimovsky
- Whitney Quesenbery

New tools.

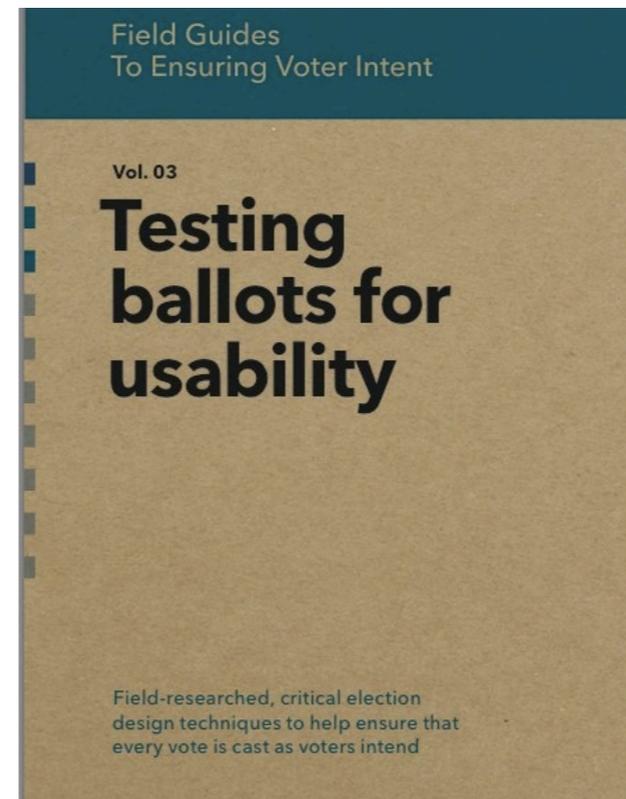
# Field Guides series



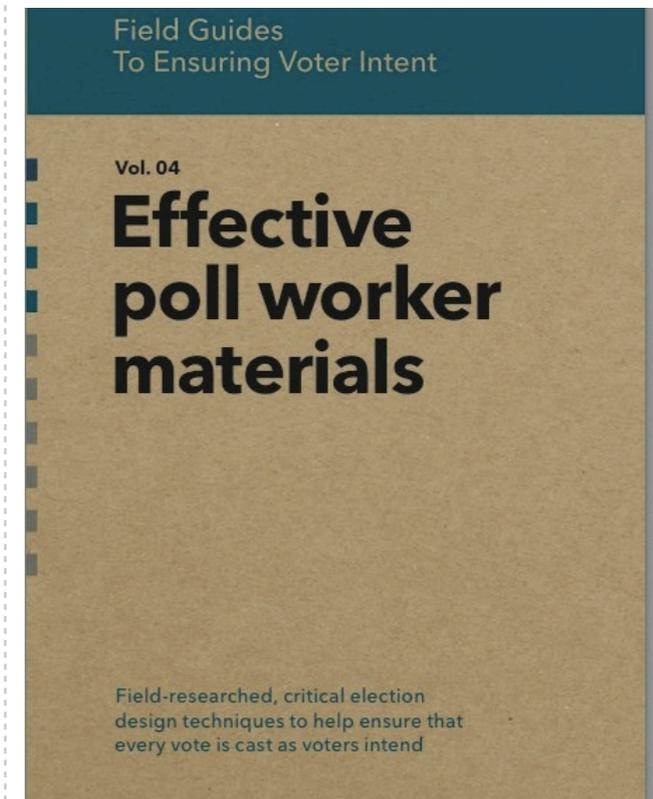
Research  
commissioned by  
**EAC**



Research  
commissioned by  
**NIST**



SOP and Usability  
and Civic Life  
Project



Research  
commissioned by  
**NIST**

# Field Guides to Ensuring Voter Intent

A Nonfiction project in Boston, MA by Dana Chisnell · [send message](#)

PROJECT HOME

UPDATES 12

BACKERS 321

COMMENTS 3



Suzanne Stassevitch, Drew Davies and 216 others like this.



<http://kck.st/xayVtK>

## ABOUT THIS PROJECT

**UPDATE April 12: What are the Field Guides going to cover?**

321

BACKERS

\$20,761

PLEGGED OF \$15,000 GOAL

0

SECONDS TO GO

### FUNDING SUCCESSFUL

This project successfully raised its funding goal on April 14.



### PLEDGE \$2 OR MORE

19 BACKERS

Thank you tweet & email

Estimated Delivery: Apr 2012

**BACKER REPORT** ← You can now create a survey

### PLEDGE \$5 OR MORE

17 BACKERS

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Like

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EMBED

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# Coming soon


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Effective election  
department  
web sites

Research partially  
funded by  
Kickstarter &  
**MacArthur**

# Coming soon

**Effective election  
department  
web sites**

**Delivering useful  
voter education**

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Research partially  
funded by  
Kickstarter &  
**MacArthur**

Research to be  
funded by the  
**MacArthur  
Foundation**

# Coming soon

**Effective election  
department  
web sites**

**Delivering useful  
voter education**

**Effective design  
for vote-by-mail**

**Designing multi-  
language ballots**

Research partially  
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Kickstarter &  
**MacArthur**

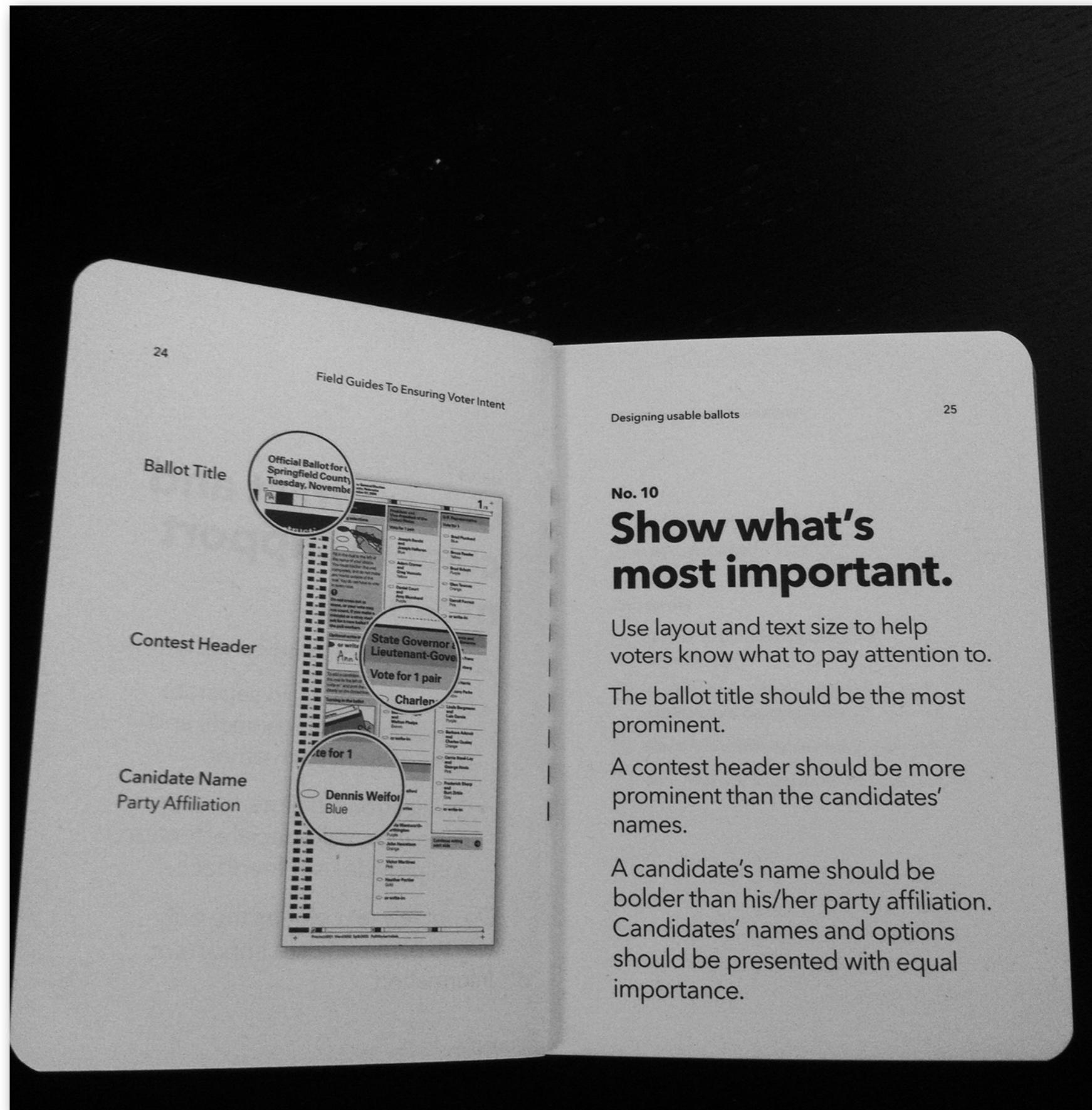
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**MacArthur  
Foundation**

Research to be  
funded by the  
**MacArthur  
Foundation**

# Field Guides To Ensuring Voter Intent

civicdesigning.org  
/fieldguides



# **Dana Chisnell**

dana@usabilityworks.net

civicdesign@usabilityworks.net

**civicdesigning.org**

@danachis

@ChadButterfly