

Research Report

Ballot design for proportional representation

**Exploring mental models for
understanding elections**

January 21, 2026

**Center for Civic
Design**



What's inside this report

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About this research

Research goals and how we tested



Why we did this research

In earlier testing, we explored how ballot design could help voters understand PR contests.

We learned that:

- 1 elected is a strong mental model
- ballot designs did not communicate more than 1 elected
- cumulative and approval ballots made voting easier for some, but raised concerns about legitimacy of elections and accurate counting

We refined our approach for the second phase. We focused on:

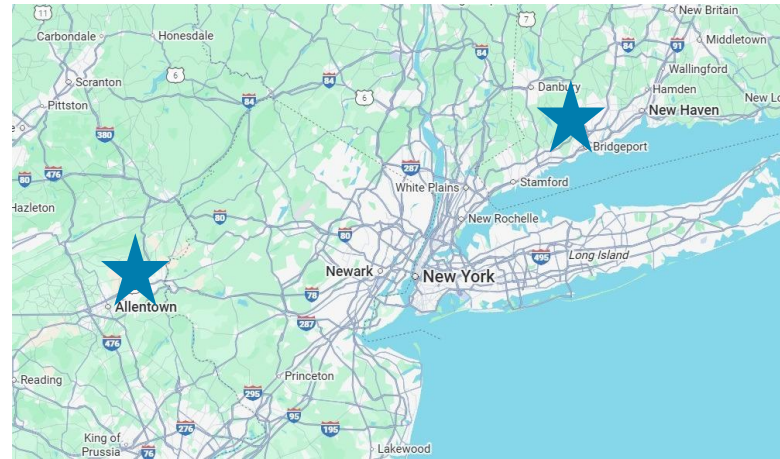
- how voters use 1 elected and other mental models to interpret PR contests
- how ballots can help voters understand more than 1 elected
- what level of instructions voters need on PR ballots
- what ballots help voters understand how votes are counted



Methodology snapshot

Method: Usability tests with PR contests, instructions, and counting methods.

Where: Bridgeport, CT and Allentown, PA
(neither have RCV or PR)



Our participants

We talked to 11 participants.

Our participants were a diverse group.

- Most were between the ages of 18 and 49.
- They were evenly divided between men and women.
- They were white, black, South Asian, and Jewish.

Participants had a variety of voting habits.

- All but one were registered to vote.
- Most started voting in 2020 or later.
- Voting frequency ranges from voting in all elections to rarely voting.



We tested 5 contests across 4 voting methods

Participants voted on 3 contests.

They reacted to 2 contests.

City Council

Rank up to 5 candidates. Mark only 1 oval in each column.
Elect 3

	choice	choice	choice	choice	choice
	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ranking

City Council

Distribute 3 votes any way you want. You can give multiple votes to the same candidate.
3 to be elected

Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

cumulative

City Council

Vote for as many candidates as you approve of
Elect 3

<input type="radio"/>	Charlene Franz Federalist Party
<input type="radio"/>	Gerard Harris Federalist Party
<input type="radio"/>	Linda Bargmann People's Party
<input type="radio"/>	Barbara Adcock People's Party

approval

City Council

Vote yes for as many candidates as you approve of
3 to be elected

	Yes	No
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>

alternate approval

1	Franz, Charlene	Federalist Party	<input type="radio"/>	<input type="radio"/>	FED	Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
2	Harris, Gerard	Federalist Party	<input type="radio"/>	<input type="radio"/>	PPL	People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
3	Zirkle, Burt	Federalist Party	<input type="radio"/>	<input type="radio"/>	LIB	Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
4	Bargmann, Linda	People's Party	<input type="radio"/>	<input type="radio"/>	CON	Constitution Party Alex Wallace, Barbara Williams, Luis Jorges Garcia	3
		People's Party	<input type="radio"/>	<input type="radio"/>	LBR	Labor Party Jelani Bongani, Mike Greher, Gregory Selden	4

mixed member PR (German)

We tested instructions and explanations of counting

3 levels of instructions*

Ranking

Level 1

Rank up to 5 candidates.

Level 2

Rank up to 5 candidates. Mark only one oval in each column.

Level 3

Rank up to 5 candidates in the order of your choice. Mark only one oval in each column. Use the ovals in the columns marked 1, 2, 3, and so on.

Cumulative

Level 1

Distribute 3 votes any way you want.

Level 2

Distribute 3 votes any way you want. You can give multiple votes to the same candidate.

Level 3

Distribute 3 votes any way you want. You can give multiple votes to the same candidate. You can give less than 3 votes.

Different counting methods

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

The candidate with the highest number of votes is elected to a seat.

The candidate with the next highest number of votes is elected to a seat. This continues until all seats are filled.



How we tested

Participants voted on the ranking, cumulative, and approval ballots.

- They used scenarios and a voter guide.
- We observed voting behavior and asked about voting strategy.

Next, we asked them to:

- choose the most helpful instructions
- react to the alternate approval ballot
- match ballots to counting methods

To wrap up, we asked participants:

- to react to a German MMP ballot
- which ballot felt the most American



The big takeaways



Current mental models conflict with PR methods

Participants expected the number of marks to be the same as the number elected.

This was a big barrier to understanding ballots even though participants marked their ballots.

Some felt that voting for fewer candidates was a more efficient and legitimate system.

They felt that fewer options makes voting easier and makes voters consider their votes more carefully.

Some were worried that voting for a party would be confusing or would conflict with voting for a candidate.



Giving the right information increases confidence

Instructions that provided more information increased confidence.

While participants differed in specific information needed, they preferred more information to minimal instructions.

Participants did not know enough about PR methods to figure out methods of counting votes.

But they identified numbers, percentages, and ranking terms as clues.

Ranking and cumulative voting supported voter intent.

The ability to rank or distribute votes among multiple candidates made most participants feel like they could convey more nuanced choices.

What we learned

Mental models that affect how participants think about PR voting methods



Participants were confused when the number of marks was different than the number elected

When the numbers did not match, participants:

- needed clarification
- expressed negative sentiments

Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice	choice	choice	choice	choice
	1	2	3	4	5

“Why are we able to rank 5 candidates if we’re only supposed to have 3?”

Participants often assumed the number elected was the number of votes.

Vote for as many candidates as you approve of
Elect 3

“The part where it says vote for as many candidates should just be vote for 3 candidates that you approve of. Or just eliminate that and say elect 3”

Different numbers conflicted with past experience

Participants used their experience with elections to figure out how to mark the ballot but finally voted without understanding the different numbers.

Mother: *“It says vote for as many as approve of but says elect 3. It’s confusing. It says elect 3 like we did before, right? It says vote for as many as you believe. But that doesn’t make sense because then it says elect 3.”*

Daughter: *“Because if you do too many, won’t it not, it would disqualify you. They probably can’t include your ballot if you have more than 3. So, I don’t know.”*

**Vote for as many
candidates as you
approve of**
Elect 3

Participants used number elected to help vote

Participants marked the same number as the number elected regardless of instructions.

City Council					
Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice	choice	choice	choice	choice
	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The ranking ballot allowed up to 5 votes for 3 open seats.

7 participants marked only 3 candidates

City Council	
Vote for as many candidates as you approve of Elect 3	
<input type="radio"/>	Charlene Franz Federalist Party
<input type="radio"/>	Gerard Harris Federalist Party
<input type="radio"/>	Linda Bargmann People's Party
<input type="radio"/>	Barbara Adcock People's Party

The approval ballot allowed as many votes as candidates on the ballot for 3 open seats.

9 participants marked only 3 candidates

Participants were not confused when numbers matched

"Cumulative was clearer than approval. It says vote as many as you approve of. Cumulative just says vote... elect 3, and you could vote multiple ways, but just elect 3. Cumulative made more sense."



City Council		
Distribute 3 votes any way you want. You can give multiple votes to the same candidate.		
👤👤👤 3 to be elected		
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/>	<input type="radio"/>

Voting for a party can allow for more voting strategies

Two participants liked the idea of voting for a party to support:

- efficient government
- a party but not all candidates in that party

“Usually, if you like the candidate, you wanna bring the people around them because they’ll have the same views. With one person from a party, one person from another party, nothing gets done. With everybody on the same page, something might actually get done.”

State Senator District ##
Vote for 1 candidate

To vote for a candidate, mark the oval next to their name.

State Legislative Party
Vote 1 party

To vote for a party, mark the oval next to their name.

1	Franz, Charlene	Federalist Party	<input type="radio"/>	<input checked="" type="radio"/>		
2	Harris, Gerard	Federalist Party	<input type="radio"/>	<input checked="" type="radio"/>		
3	Zirkle, Burt	Federalist Party	<input type="radio"/>	<input checked="" type="radio"/>		
4	Bargmann, Linda	People's Party	<input type="radio"/>	<input checked="" type="radio"/>		
5	Adcock, Barbara	People's Party	<input type="radio"/>	<input checked="" type="radio"/>		

<input type="radio"/>	FED	Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
<input type="radio"/>	PPL	People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
<input type="radio"/>	LIB	Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
<input type="radio"/>	CON	Constitution Party Alex Wallace, Barbara Williams, Luis Jorge Garcia	3
<input type="radio"/>	LBR	Labor Party Jelani Bongani, Mike	4

“I can be in a party but not agree with all the candidates.”

Participants also had concerns about voting for a party

Participants in Pennsylvania felt voting for a party is confusing. That state had straight ticket voting until 2019. One participant in Connecticut was worried about conflicting votes.

State Senator District ## Vote for 1 candidate				State Legislative Party Vote 1 party			
To vote for a candidate, mark the oval next to their name.				To vote for a party, mark the oval next to their name.			
1	Franz, Charlene	Federalist Party	<input type="radio"/>	<input type="radio"/>	FED	Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
2	Harris, Gerard	Federalist Party	<input type="radio"/>	<input type="radio"/>	PPL	People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
3	Zirkle, Burt	Federalist Party	<input type="radio"/>	<input type="radio"/>	LIB	Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
4	Bargmann, Linda	People's Party	<input type="radio"/>	<input type="radio"/>	CON	Constitution Party Alex Wallace, Barbara Williams, Luis Jorges Garcia	3
5	Adcock, Barbara	People's Party	<input type="radio"/>	<input type="radio"/>	LBR	Labor Party Jelani Bongani, Mike Graber, Gregory Selden	4

“You’re gonna be going for the party of whoever you pick on this side. That just makes it confusing. You should just go for whoever you want.”

“I don’t really like the party section because I don’t know why I have to choose a party. Like, I didn’t vote for someone in my party, you know?”

Some think voting for 1 results in easier choices

Some participants preferred the German ballot with vote for 1 candidate.

1	Franz, Charlene	Federalist Party	<input type="radio"/>	<input type="radio"/>	FED	Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
2	Harris, Gerard	Federalist Party	<input type="radio"/>	<input type="radio"/>	PPL	People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
3	Zirkle, Burt	Federalist Party	<input type="radio"/>	<input type="radio"/>	LIB	Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
4	Bargmann, Linda	People's Party	<input type="radio"/>	<input type="radio"/>	CON	Constitution Party Alex Wallace, Barbara Williams, Luis Jorges Garcia	3
5	Adcock, Barbara	People's Party	<input type="radio"/>	<input type="radio"/>	LBR	Labor Party Jelani Bongani, Mike Greher, Gregory Selden	4

"You're not juggling between multiple people. And then same thing with the parties. Going for 1 party, and that's about it."

"I like 1 vote only, so pick who you want and stick with it, rather than having multiple different options."

"That's just easy. Less options is sometimes better."

Some felt that voting for 1 leads to smarter choices

"I think if people have all these options, they get confused. What am I gonna vote for? This person 3 times?"

City Council	
<p>Distribute 3 votes any way you want. You can give multiple votes to the same candidate.</p> <p> 3 to be elected</p>	
<p>Charlene Franz Federalist Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Gerard Harris Federalist Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Linda Bargmann People's Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Barbara Adcock People's Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Carrie Steel-Loy Liberty Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>

1	Franz, Charlene	Federalist Party	<input type="radio"/>	<input checked="" type="radio"/> FED	Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
2	Harris, Gerard	Federalist Party	<input type="radio"/>	<input checked="" type="radio"/> PPL	People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
3	Zirkle, Burt	Federalist Party	<input type="radio"/>	<input checked="" type="radio"/> LIB	Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
4	Bargmann, Linda	People's Party	<input type="radio"/>	<input checked="" type="radio"/> CON	Constitution Party Alex Wallace, Barbara Williams, Luis Jorges Garcia	3
5	Adcock, Barbara	People's Party	<input type="radio"/>	<input checked="" type="radio"/> LBR	Labor Party Jelani Bongani, Mike Greher, Gregory Selden	4

"Because when you give people too many choices, then everyone's all over the place. When you limit options, then you get a clearer point of view of what people are more needing in their government."

City Council	
<p>Distribute 3 votes any way you want. You can give multiple votes to the same candidate.</p> <p> 3 to be elected</p>	
<p>Charlene Franz Federalist Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Gerard Harris Federalist Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Linda Bargmann People's Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Barbara Adcock People's Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>
<p>Carrie Steel-Loy Liberty Party</p>	<input type="radio"/> <input type="radio"/> <input type="radio"/>

City Council	
<p>Vote for as many candidates as you approve of</p> <p>Elect 3</p>	
<input type="radio"/>	<p>Charlene Franz Federalist Party</p>
<input type="radio"/>	<p>Gerard Harris Federalist Party</p>
<input type="radio"/>	<p>Linda Bargmann People's Party</p>
<input type="radio"/>	<p>Barbara Adcock People's Party</p>

Familiar and simple ballots felt more American

Most said ballots feel American when they are:

- similar to ballots currently used
- easy to understand

“The cumulative looks more like what I’m used to. I guess the options, you know, distribute 3 votes any way you want. And you could give multiple votes to the same candidate. I mean, I guess that’s like the freedom in America.”

Ranking may remind people of surveys they often see

One participant said ballots feel American if they are similar to surveys.

“The ranking ballot because with surveys or giving your feedback, especially online, it’s always from a 1 to a 5, how much you like this. That’s so American. Everything’s always about ranking, rank this, rank that. Ballots may not always look like that, but people are so used to picking your favorite.”

City Council					
Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice	choice	choice	choice	choice
	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People’s Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People’s Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What we learned

Voting behavior and strategy on PR
ballot designs



How participants selected candidates and parties

Participants studied the voter guide before marking their ballots. They often commented that the voter guide would be helpful when voting in elections.

Participants marked the same candidates and parties across different ballots. Most of their dilemmas voting came from choosing between 2 candidates, not the ballots.

Voter Guide: Parties

Party name	Platform
Federalist	Integrity, Honesty, Commitment. We're not afraid of hard choices. Strong businesses = healthy society. No dog walking after 7pm.
People's	A fresh perspective to politics. Build bridges across communities. Monthly town halls to listen to constituents. Limits to the number of pizza restaurants per district.
Liberty	Fences make good neighbors. Live and let live as long as no one is hurt. Lower taxes = vibrant neighborhoods. Ban strawberry ice cream.
Constitution	Education is a top priority. More funding for schools. Art and music classes. Allow people to declare bankruptcy.
Public	Great power, great responsibility. Our children deserve the best. Start up funds for small businesses. Just say no to the coal industry.
Labor	Protect workers. Support industry. Smart growth and lower taxes. Good leaders are good for everyone. Ban pineapple on pizza.

Voter Guide: City Council Candidates

Name	Party	Description
Charlene Franz	Federalist Party	Integrity, Honesty, Commitment.
Gerard Harris	Federalist Party	Strong businesses = healthy society.
Linda Bargmann	People's Party	A fresh perspective to politics.
Barbara Adcock	People's Party	Build bridges across communities.
Carrie Steel-Loy	Liberty Party	Fences make good neighbors.
Frederick Sharp	Liberty Party	Lower taxes = vibrant neighborhoods.
Alex Wallace	Constitution Party	Education is a top priority.
Barbara Williams	Constitution Party	More funding for school upgrades.
Althea Sharp	Public Party	Great power, great responsibility.
Douglas Alpern	Public Party	Start up funds for small businesses.
Jelani Bongani	Labor Party	Protect workers. Support industry.
Mike Greher	Labor Party	Smart growth and lower taxes.
Patricia Alexander	Independent	Let's bring a new perspective to politics.



Participants only made errors on the ranking ballot

3 errors were overvotes

Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice	choice	choice
	1	2	3
Charlene Franz Federalist Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>

Mike Greher Labor Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patricia Alexander Independent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in <i>Misty</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in <i>Emma</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in <i>Jesus</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Frederick Sharp Liberty Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alex Wallace Constitution Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Williams Constitution Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Althea Sharp Public Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Douglas Alpern Public Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jelani Bongani Labor Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

1 error was an overrank

Jelani Bongani Labor Party	<input checked="" type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mike Greher Labor Party	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Those who marked without errors found ranking easy

They described it as orderly, transparent, and clear.

Frederick Sharp Liberty Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alex Wallace Constitution Party	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Williams Constitution Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Althea Sharp Public Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Douglas Alpern Public Party	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jelani Bongani Labor Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mike Greher Labor Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patricia Alexander Independent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice	choice	choice	choice	choice
	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frederick Sharp Liberty Party	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

*"I like how it's just very **orderly**."*

*"I think this is more **transparent**. It's easier to pick 1, 2, 3."*


*"Maybe I'm used to the ranked choice already, but I think it's pretty **clear**. Like, it says, mark only 1 in each column. And you know who's your 1st, 2nd, 3rd choice."*

City Council					
Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice 1	choice 2	choice 3	choice 4	choice 5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Most participants preferred the ranking ballot

Ranking made them think about their votes and allowed them to express more nuanced intent.

"I like the ranking the best because I changed my vote. It just made me think more. It made me look again at the candidate platforms."

City Council	
Distribute 3 votes any way you want. You can give multiple votes to the same candidate.	
 3 to be elected	
Charlene Franz Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>

No one gave multiple marks to 1 candidate on the cumulative ballot

Participants said they would give multiple marks to 1 candidate if they had strong feelings about that candidate and more information about platforms.

"I like to spread it out. If I like 3 different things, I'll vote for 3 different things. It depends. If I'm strongly for something, say I like one party, I'd vote for both the candidates for that party."

Ranking affected marking on the cumulative ballot

6 participants marked across columns

People who saw the ranking ballot first were more likely to mark across columns.

Rank up to 5 candidates. Mark only 1 oval in each column.

Elect 3

City Council	
Distribute 3 votes any way you want. You can give multiple votes to the same candidate. 👤👤👤 3 to be elected	
Charlene Franz Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Frederick Sharp Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Alex Wallace Constitution Party	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Williams Constitution Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Althea Sharp Public Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Douglas Alpern Public Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Jelani Bongani Labor Party	<input type="radio"/> <input type="radio"/> <input checked="" type="radio"/>
Mike Greher Labor Party	<input type="radio"/> <input checked="" type="radio"/> <input type="radio"/>


5 marked only in the first column

People who saw the cumulative ballot first were more likely to mark only in the first column.

Distribute 3 votes any way you want. You can give multiple votes to the same candidate.

👤👤👤 3 to be elected

City Council	
Distribute 3 votes any way you want. You can give multiple votes to the same candidate. 👤👤👤 3 to be elected	
Charlene Franz Federalist Party	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>
Gerard Harris Federalist Party	<input checked="" type="radio"/> <input type="radio"/> <input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Frederick Sharp Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Alex Wallace Constitution Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Williams Constitution Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Althea Sharp Public Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Douglas Alpern Public Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Jelani Bongani Labor Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Mike Greher Labor Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>

City Council	
Distribute 3 votes any way you want. You can give multiple votes to the same candidate.	
 3 to be elected	
Charlene Franz Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>

The cumulative ballot resulted in careful choices

Some participants said that 3 votes made them hone their choices carefully.

"It was a little difficult because I picked more than 3 at first. I was trying to figure out who I was gonna pick. I compared in my view whose con was worse than the other con."

"It nailed it all down. Instead of having all these candidates, you kinda had to decide and go with what you felt."

City Council	
Vote for as many candidates as you approve of	
Elect 3	
<input type="radio"/>	Charlene Franz Federalist Party
<input type="radio"/>	Gerard Harris Federalist Party
<input type="radio"/>	Linda Bargmann People's Party
<input type="radio"/>	Barbara Adcock People's Party

Participants felt the approval ballot did not convey voter intent

The approval ballot was participants' least favorite. Most preferred ranking and distributing votes as ways to:

- convey more nuanced intent
- facilitate multiple votes

"At least if you're ranking them, you know this person is who I really want. Then after the first round, if you don't get this guy, you're fine with the other. The approval ballot is more, this person or the last one could be the one that you don't really want. You're settling for whoever."

City Council	
Vote for as many candidates as you approve of	
Elect 3	
<input type="radio"/>	Charlene Franz Federalist Party
<input type="radio"/>	Gerard Harris Federalist Party
<input type="radio"/>	Linda Bargmann People's Party
<input type="radio"/>	Barbara Adcock People's Party

A few participants preferred the approval for simplicity

They found ranking overly complicated and 1 column marking easier.

"It was definitely more intuitive than the other ballots. Because the columns on the other imply rank."

"It feels more streamlined. I don't really like the 3 bubbles and separating 3 votes out. I like this way better. Just, select 3 that you are interested in rather than splitting it up or doing whatever."

City Council		
Vote yes for as many candidates as you approve of 👤👤👤 3 to be elected	Yes	No
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>

Yes/no columns cause marking confusion

Participants were worried about needing to mark each candidate.

“Do I have to only select yes for 3, or do I have to select no for everybody I don’t want? It would be helpful if there were some instructions.”

“Do I have to do a yes, no, yes, no for every single one? Or, if I leave it blank, what’s gonna happen? Is it gonna be an automatic yes or an automatic no?”

City Council		
Vote yes for as many candidates as you approve of 👤👤👤 3 to be elected	Yes	No
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>

Yes/no marks raised questions about the meaning of votes

Marking no felt more definite than not marking candidates on other ballots.

This made participants worry about:

- voting on candidates they don't have strong opinions about
- uninformed or irresponsible voters

"A lot of voters go into elections not knowing each and every candidate. I don't think it would be an honest system."

A few felt that yes/no columns allow for clearer intent

City Council		
Vote yes for as many candidates as you approve of	Yes	No
 3 to be elected		
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>

"I like the yes/no better. It kinda gives you a more concrete answer."

"I like this because I like the yes and no. It's like, yes, I want this person. No, I don't really want this person. It's like a definite answer."

What we learned

Ballot instructions and counting methods



Ranking

Level 1

Rank up to 5 candidates.

Level 2

Rank up to 5 candidates. Mark only one oval in each column.

Level 3

Rank up to 5 candidates in the order of your choice. Mark only one oval in each column. Use the ovals in the columns marked 1, 2, 3, and so on.

Cumulative

Level 1

Distribute 3 votes any way you want.

Level 2

Distribute 3 votes any way you want. You can give multiple votes to the same candidate.

Level 3

Distribute 3 votes any way you want. You can give multiple votes to the same candidate. You can give less than 3 votes.

We tested 3 versions of ballot instructions

We asked participants about the level of information they need in ballot instructions.

- We showed them 3 levels of instructions from minimal to more information.
- We tested instructions for the ranking and cumulative ballots.*

Ranking

Level 1

Rank up to 5 candidates.

Level 2

Rank up to 5 candidates. Mark only one oval in each column.

Level 3

Rank up to 5 candidates in the order of your choice. Mark only one oval in each column. Use the ovals in the columns marked 1, 2, 3, and so on.

Participants needed to know how to rank

Nearly all preferred the middle and longest levels of instructions on the ranking ballot.

But they varied in the information they found most useful.

“I like the last one because they added the words, in order of your choice. It helps be a little more specific. It just says rank up to 5 candidates, but some people need that extra confirmation.”

“The second one is pretty straightforward. The first one isn’t really enough information. This one tells you mark only 1 oval in each column. That’s good.”

Ranking

Level 1

Rank up to 5 candidates.

Level 2

Rank up to 5 candidates. Mark only one oval in each column.

Level 3

Rank up to 5 candidates in the order of your choice. Mark only one oval in each column. Use the ovals in the columns marked 1, 2, 3, and so on.

A few found the longest ranking instructions confusing

They said that more information led to more confusion.

“The last sentence seems like fluff. It could make things more confusing than it needs to be. I like level 2. Mark only 1 oval in each column helps to understand what you’re doing, that you’re given 1 oval for each individual choice. So you can only pick 1 person for each choice.”

Ranking

Level 1

Rank up to 5 candidates.

Level 2

Rank up to 5 candidates. Mark only one oval in each column.

Level 3

Rank up to 5 candidates in the order of your choice. Mark only one oval in each column. Use the ovals in the columns marked 1, 2, 3, and so on.

More information helped distribute votes on the cumulative ballot

Participants wanted the longest version of instructions on the cumulative ballot.

"I like that it says that you don't have to give 3 votes if you don't want to. If I had no interest in other parties, I could just vote for the party that I want. And it says you can give multiple votes to the same candidate. So if I just wanted to vote on 1 thing, I could do that without having to worry about other issues that didn't pertain to me. And distribute 3 votes any way you want. It's good."

Participants looked at explanations of counting votes

We asked them to match the ballot to the correct method of counting.

City Council					
Rank up to 5 candidates. Mark only 1 oval in each column.	choice	choice	choice	choice	choice
Elect 3	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The ranking ballot used instructions for proportional ranked choice.

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

City Council		
Distribute 3 votes any way you want. You can give multiple votes to the same candidate.		
🗳️🗳️🗳️ 3 to be elected		
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/>	<input type="radio"/>

The cumulative and approval ballots used the same description.

City Council	
Vote for as many candidates as you approve of	
Elect 3	
<input type="radio"/>	Charlene Franz Federalist Party
<input type="radio"/>	Gerard Harris

The candidate with the highest number of votes is elected to a seat.

The candidate with the next highest number of votes is elected to a seat. This continues until all seats are filled.

Half correctly matched counting method to ballot

Some correct matches were based on the idea that ranking is a more complex voting process.

“The cumulative and approval are more straightforward. They're more to the point.”

“The candidate with the highest number of votes is elected to a seat. I feel like that's kind of status quo. The cumulative could almost be the same thing as approval to an extent. Whereas this is like, you're actually ranking them with your choices.”

City Council		
Rank up to 5 candidates. Mark only 1 oval in each column.	choice	choice
Elect 3	1	2
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

City Council	
Distribute 3 votes any way you want. You can give multiple votes to the same candidate.	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 3 to be elected	
Charlene Franz Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>

Vote for as many candidates as you approve of	
Elect 3	
<input type="checkbox"/>	Charlene Franz Federalist Party
<input type="checkbox"/>	Gerard Harris Federalist Party
<input type="checkbox"/>	Linda Bargmann People's Party
<input type="checkbox"/>	Barbara Adcock People's Party

Participants used ranking to understand counting

2 correctly associated ranking with counting in rounds

"The fewest votes gets eliminated. Because the counting happens in rounds. These are your choices in order. They get eliminated."

City Council					
Rank up to 5 candidates. Mark only 1 oval in each column.	choice	choice	choice	choice	choice
Elect 3	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

2 incorrectly associated top rank with highest number of votes

"The one with the highest number of votes is elected. If a lot of people vote for the same person for choice 1, they get the highest number of votes."

City Council		
Distribute 3 votes any way you want. You can give multiple votes to the same candidate.		
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> 3 to be elected		
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/>	<input type="radio"/>

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

Percentages in counting methods caused issues

One associated multiple marks for 1 candidate on cumulative with 25%.

"You can give multiple votes to the same. If there's a candidate where the volume of vote is higher, it made me think 25%."

One associated 1 vote per candidate on approval with 25%.

"I put these together because you can only have 1 vote for any 1 person, so I thought if 1 of them reached 25%."

City Council	
Distribute 3 votes any way you want. You can give multiple votes to the same candidate. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 3 to be elected	
Charlene Franz Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/> <input type="radio"/> <input type="radio"/>

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

City Council	
Vote for as many candidates as you approve of Elect 3	
<input type="radio"/> Charlene Franz Federalist Party	
<input type="radio"/> Gerard Harris Federalist Party	
<input type="radio"/> Linda Bargmann People's Party	
<input type="radio"/> Barbara Adcock People's Party	

Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

How we conducted this research

Testing sessions and materials



How we recruited

We chose Bridgeport, CT and Allentown, PA because they:

- Had not had RCV or PR voting methods
- Were outside of the usual commuting range for NYC that has RCV

We posted on Craigslist and spoke with them in cafes.

We screened participants for:

- Voting experience in at least one recent election
- Diversity in age, gender, race

We had 7 participants in Bridgeport and 4 in Allentown.



How we conducted testing sessions

First, we asked participants about their experiences voting.

We learned what they know about elections and attitudes towards voting.

They marked ranking, approval, and cumulative contests.

We got them to read a voter guide and scenarios that explained each election. They referred to these while voting.

We observed marking behavior. We asked what was challenging, if they had any dilemmas in making choices, and what they would do in alternate situations.

The voter guide had party and candidate information

We used imaginary names.

Platforms had a mix of true to life and unrealistic elements.

Voter Guide: Parties		
Party name	Platform	
Federalist	Integrity. Honesty. Commitment. We're not afraid of hard choices. Strong businesses = healthy society. No dog walking after 7pm.	
People's	A fresh perspective to politics. Build bridges across communities. Monthly town halls to listen to constituents. Limits to the number of pizza restaurants.	
Liberty	Fences make good neighbors. Live and let live as long as no one is harmed. Lower taxes = vibrant neighborhoods. Ban strawberry ice cream.	
Constitution	Education is a top priority. More funding for school upgrades. Art and music classes in every public school. Allow people to declare pets as dependents.	
Public	Great power, great responsibility. Our children deserve better. Start up funds for small businesses. Just say no to the county fair.	
Labor	Protect workers. Support industry. Smart growth and lower taxes. Good leaders are good servants. Ban pineapple on pizza.	

Voter Guide: City Council Candidates		
Name	Party	Description
Charlene Franz	Federalist Party	<i>Integrity. Honesty. Commitment.</i>
Gerard Harris	Federalist Party	<i>Strong businesses = healthy society.</i>
Linda Bargmann	People's Party	<i>A fresh perspective to politics.</i>
Barbara Adcock	People's Party	<i>Build bridges across communities.</i>
Carrie Steel-Loy	Liberty Party	<i>Fences make good neighbors.</i>
Frederick Sharp	Liberty Party	<i>Lower taxes = vibrant neighborhoods.</i>
Alex Wallace	Constitution Party	<i>Education is a top priority.</i>
Barbara Williams	Constitution Party	<i>More funding for school upgrades.</i>
Althea Sharp	Public Party	<i>Great power, great responsibility.</i>
Douglas Alpern	Public Party	<i>Start up funds for small businesses.</i>
Jelani Bongani	Labor Party	<i>Protect workers. Support industry.</i>
Mike Greher	Labor Party	<i>Smart growth and lower taxes.</i>
Patricia Alexander	Independent	<i>Let's bring a new perspective to politics.</i>



Election scenarios provided information about contests

Colors matched stickers on ballots for easy discussion without naming the voting method.

ranking

Scenario A

This is an election year for city council.

- Your city has 4 districts.
- The city council has 12 members.
- Each district has 3 council members.
- The role of the city council is to introduce and vote on legislation, monitor various city departments, and create the budget with the mayor.

You are voting for the 3 city council members who represent your district.

cumulative

Scenario B

This is an election year for city council.

- Your city has 4 districts.
- The city council has 7 members.
- Each district has 1 council member.
- The other 3 seats are at-large council members that represent the whole city.

You are voting for the 3 at-large council members.

approval

Scenario C

This is an election year for city council.

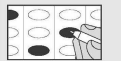
- Your city has 4 districts.
- The city council has 7 members.
- Each district has 1 council member.
- The other 3 seats are at-large council members that represent the whole city.

You are voting for the 3 at-large council members.





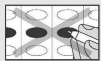
Instructions for Ranked Choice Voting



Rank candidates in the order of your choice.
Use the ovals in the columns marked choice 1, 2, 3, and so on.



Wrong: Mark no more than 1 oval in a column. You may mark as many or as few candidates as the columns allow.



Wrong: Mark only 1 oval for a candidate. Ranking more candidates will not hurt your 1st-choice candidate.

Any mark or writing outside the spaces for voting may void your ballot.
! If you make a mistake, ask for a new ballot.

City Council

Rank up to 5 candidates. Mark only 1 oval in each column. Elect 3	choice	choice	choice	choice	choice
	1	2	3	4	5
Charlene Franz Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gerard Harris Federalist Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Linda Bargmann People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Adcock People's Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Carrie Steel-Loy Liberty Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Frederick Sharp Liberty Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alex Wallace Constitution Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Barbara Williams Constitution Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Althea Sharp Public Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Douglas Alpern Public Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jelani Bongani Labor Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mike Greher Labor Party	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Patricia Alexander Independent	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write-in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Participants voted on a ranking contest





Instructions



To vote for a candidate, completely fill in the oval next to their name.



To write in a candidate, write the name in the blank space and fill in the oval next to their name.

You do not have to vote in every contest.

i If you make a mistake, ask for a new ballot.

Mayor

Vote for 1
Elect 1

Dennis Weiford
Federalist Party

Loyel Garriss
People's Party

Sylvia Wentworth
Liberty Party

Heather Nguyen
Constitution Party

Victor Martinez
Public Party

Davitra Rangel
Labor Party

Write-in

Comptroller

Vote for 1
Elect 1

Lillian Cohen
Federalist Party

Write-in

Attorney General

Vote for 1
Elect 1

Ashley Hildebrand
People's Party

James Garrity
Liberty Party

Laila Shamsi
Federalist Party

Write-in

City Council

Distribute 3 votes any way you want. You can give multiple votes to the same candidate.

3 to be elected

Charlene Franz
Federalist Party

Gerard Harris
Federalist Party

Linda Bargmann
People's Party

Barbara Adcock
People's Party

Carrie Steel-Loy
Liberty Party

Frederick Sharp
Liberty Party

Alex Wallace
Constitution Party

Barbara Williams
Constitution Party

Althea Sharp
Public Party

Douglas Alpern
Public Party

Jelani Bongani
Labor Party

Mike Greher
Labor Party

Patricia Alexander
Independent

Write-in

Write-in

Write-in

Participants voted on a cumulative contest





Instructions



To vote for a candidate, completely fill in the oval next to their name.



To write in a candidate, write the name in the blank space and fill in the oval next to their name.

You do not have to vote in every contest.

1 If you make a mistake, ask for a new ballot.

Mayor

Vote for 1

Elect 1

Dennis Weiford
Federalist Party

Lloyd Garriss
People's Party

Sylvia Wentworth
Liberty Party

Heather Nguyen
Constitution Party

Victor Martinez
Public Party

Davitra Rangel
Labor Party

Write-in

Comptroller

Vote for 1

Elect 1

Lillian Cohen
Federalist Party

Write-in

Attorney General

Vote for 1

Elect 1

Ashley Hildebrand
People's Party

James Garritty
Liberty Party

Laila Shamsi
Federalist Party

Write-in

City Council

Vote for as many candidates as you approve of

Elect 3

Charlene Franz
Federalist Party

Gerard Harris
Federalist Party

Linda Bargmann
People's Party

Barbara Adcock
People's Party

Carrie Steel-Loy
Liberty Party

Frederick Sharp
Liberty Party

Alex Wallace
Constitution Party

Barbara Williams
Constitution Party

Althea Sharp
Public Party

Douglas Alpern
Public Party

Jelani Bongani
Labor Party

Mike Greher
Labor Party

Patricia Alexander
Independent

Write-in

Write-in

Write-in

Participants voted on an approval contest



After participants voted

We asked participants to review the ballots.

We asked them to rank the ballots and whether they felt confident in marking and that their votes would be counted as intended.

We showed 3 versions of instructions for the ballots.

We asked what level of information was most helpful and why.

We showed them a version of the approval contest with 2 columns.

They compared the 2 approval ballots.

Versions of instructions had 3 levels of information

Instructions started with the most basic level of information and increased.

A printing error prevented us from testing instructions for the approval contest.

Ranking

Level 1

Rank up to 5 candidates.

Level 2

Rank up to 5 candidates. Mark only one oval in each column.

Level 3

Rank up to 5 candidates in the order of your choice. Mark only one oval in each column. Use the ovals in the columns marked 1, 2, 3, and so on.

Cumulative

Level 1

Distribute 3 votes any way you want.

Level 2

Distribute 3 votes any way you want. You can give multiple votes to the same candidate.

Level 3

Distribute 3 votes any way you want. You can give multiple votes to the same candidate. You can give less than 3 votes.





Instructions



To vote for a candidate, completely fill in the oval next to their name.



To write in a candidate, write the name in the blank space and fill in the oval next to their name.

You do not have to vote in every contest.

i If you make a mistake, ask for a new ballot.

Mayor

Vote for 1
Elect 1

Dennis Welford
Federalist Party

Lloyd Garriss
People's Party

Sylvia Wentworth
Liberty Party

Heather Nguyen
Constitution Party

Victor Martinez
Public Party

Davitra Rangel
Labor Party

Write-in

Comptroller

Vote for 1
Elect 1

Lillian Cohen
Federalist Party

Write-in

Attorney General

Vote for 1
Elect 1

Ashley Hildebrand
People's Party

James Garritty
Liberty Party

Laila Shamsi
Federalist Party

Write-in

City Council

Vote yes for as many candidates as you approve of
3 to be elected

Charlene Franz
Federalist Party

Gerard Harris
Federalist Party

Linda Bargmann
People's Party

Barbara Adcock
People's Party

Carrie Steel-Loy
Liberty Party

Frederick Sharp
Liberty Party

Alex Wallace
Constitution Party

Barbara Williams
Constitution Party

Althea Sharp
Public Party

Douglas Alpern
Public Party

Jelani Bongani
Labor Party

Mike Greher
Labor Party

Patricia Alexander
Independent

Write-in

Write-in

Write-in

Yes No

Participants commented on an alternate approval contest

This version had yes no columns.

City Council

Vote for as many candidates as you approve of
Elect 3

Charlene Franz
Federalist Party

Gerard Harris
Federalist Party

Linda Bargmann
People's Party

Barbara Adcock
People's Party

The first version they voted on had 1 column.



Wrapping up testing sessions

Participants matched descriptions of counting votes to ballots.

We recorded their logic and how they made sense of the contests. We explained when they were incorrect and observed how they thought through the answer.

We showed them a German mixed member PR ballot.

We got their reactions and asked what they thought about voting for a candidate and a party.

To wrap up, we asked which ballot they had seen during the session felt the most American.



Participants matched counting methods to contests

Descriptions of vote counting were based on explanations from election offices where these methods are used.

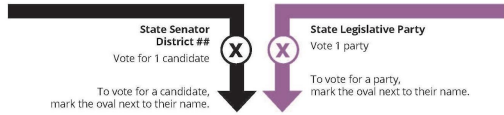
Candidates must receive more than 25% of the vote to be elected.

Counting happens in rounds. In each round of tabulation, the candidate with the fewest votes is eliminated and their whole votes are transferred to each of their voters' next highest ranked choices.

Once a candidate reaches over 25% of the vote, tabulation continues until enough additional candidates to fill the seats reach over 25% of the vote.

The candidate with the highest number of votes is elected to a seat.

The candidate with the next highest number of votes is elected to a seat. This continues until all seats are filled.



1	Franz, Charlene	Federalist Party	<input type="radio"/>
2	Harris, Gerard	Federalist Party	<input type="radio"/>
3	Zirkle, Burt	Federalist Party	<input type="radio"/>
4	Bargmann, Linda	People's Party	<input type="radio"/>
5	Adcock, Barbara	People's Party	<input type="radio"/>
6	Talarico, Marty	People's Party	<input type="radio"/>
7	Steel-Loy, Carrie	Liberty Party	<input type="radio"/>
8	Sharp, Frederick	Liberty Party	<input type="radio"/>
9	Tawa, Susan	Liberty Party	<input type="radio"/>
10	Wallace, Alex	Constitution Party	<input type="radio"/>
11	Williams, Barbara	Constitution Party	<input type="radio"/>
12	Garcia, Luis Jorges	Constitution Party	<input type="radio"/>
13	Bongani, Jelani	Labor Party	<input type="radio"/>
14	Greher, Mike	Labor Party	<input type="radio"/>
15	Selden, Gregory	Labor Party	<input type="radio"/>

<input type="radio"/>	FED Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
<input type="radio"/>	PPL People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
<input type="radio"/>	LIB Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
<input type="radio"/>	CON Constitution Party Alex Wallace, Barbara Williams, Luis Jorges Garcia	3
<input type="radio"/>	LBR Labor Party Jelani Bongani, Mike Greher, Gregory Selden	4

Participants voted on a German mixed member PR contest

We used the same candidates and parties as the other ballots.

State Senator District ##
Vote for 1 candidate

To vote for a candidate, mark the oval next to their name.

State Legislative Party
Vote 1 party

To vote for a party, mark the oval next to their name.

1	Franz, Charlene	Federalist Party	<input type="radio"/>
2	Harris, Gerard	Federalist Party	<input type="radio"/>
3	Zirkle, Burt	Federalist Party	<input type="radio"/>
4	Bargmann, Linda	People's Party	<input type="radio"/>
5	Adcock, Barbara	People's Party	<input type="radio"/>

<input type="radio"/>	FED Federalist Party Charlene Franz, Gerald Harris, Burt Zirkle	1
<input type="radio"/>	PPL People's Party Linda Bargmann, Barbara Adcock, Marty Talarico	2
<input type="radio"/>	LIB Liberty Party Carrie Steel-Loy, Frederick Sharp, Susan Tawa	5
<input type="radio"/>	CON Constitution Party Alex Wallace, Barbara Williams, Luis Jorges Garcia	3
<input type="radio"/>	LBR Labor Party Jelani Bongani, Mike Greher, Gregory Selden	4



Our participants: demographics

We had 11 participants total.

A few did not answer all questions.

Age range	
18 - 29	5
30 - 49	5
50 - 64	1

Gender	
Male	6
Female	5

Race/ethnicity	
White	5
Black	4
South Asian	1
Jewish	1

Language	
English	5
Russian	1
Haitian Creole	1
Urdu	1



Our participants: voting history

All but 1 are registered to vote.

Voting frequency Participation varies by election.	
All elections including local	5
State and national elections	2
Depends on the election or candidates	1
Rarely vote	3

Most recent election Most voted recently.	
2025	3
2024	3
2021 - 2023	1
2020 or earlier	2

First election Most are newer voters.	
2020 or later	7
2010 - 2019	2
2000 - 2009	1
1970s	1



Why participants vote

Participants expressed a range of motivations for voting. They talked about:

- Policies that help people who aren't wealthy
- Exercising their right
- Impact in a swing state
- Access to news about the world
- Peer pressure

"Before I started seeing the news, I really didn't care much about elections. But now that I can see things that are happening, it's definitely influenced me to vote."

"Determining factor for me is who's gonna do more for the people who aren't rich, who is running on policies that will help the everyday person live a high quality life."

Thank you!

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