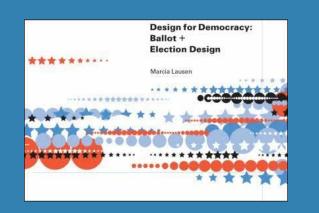
Defects by design Ballots that fool voters

Whitney QuesenberyCenter for Civic Design@civicdesign | @whitneyq







EAC / Design for Democracy Effective Designs for the Administration of Federal Elections (2007) Better Ballots (2008), Better Design, Better Elections (2012) and Design Deficiencies and Lost Votes (2011) Field Guides to Ensuring Voter Intent, Vol 01 Designing Usable Ballots Anywhere Ballot

A failure of intent caused by Typography Ballot layout Marking mechanisms Instructions and messages

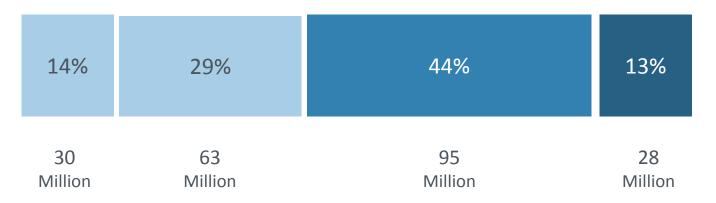
and election codes that require poor design

Election design challenges affect all facets of voting

Perception Interaction Understanding

and civic literacy gaps

43% of adults in the US read at basic or below basic levels



U.S. National Assessment of Adult Literacy <u>http://nces.ed.gov/naal/kf_demographics.asp</u>



If you can't read the ballot effectively, you can't vote accurately

OFFICE	GOVERN LIEUTENAN (Vole C	OCVERNOR .	COMPTROLLER (/ole for any DNE)	ATTOP CENE (Vow for a	RAL	UNITED STATES SENATOR (6 Year Terms (Vete for any ONE)	UNITED SERV (2 Year - The (Vote-for a	DOR garant Tarmi	REPRESENTATIVE IN CONCHESS 20vd Dister (Jobs for any ONE)	STATE SENATOR (OverDation (Visite for any ONE)	MEMBER OF ASSEMBLY 1360 Durint (Vale for any DNE)	SURPOGATE COURT ALDOS (roat for any ONE)	COUNTY JUDGE (Not for any ONE)	SHERIFF (Artie for any ONE)	CCUNTY LEGISLATOR factories (vote for any ONE)		
	1A Andrew M Cuomo Robert J Duffy		3A Thomas P DiNapoli	4A Eric T Schneiderman		GA Churles F Schumer	TA Kinsten F Gillibrand		M. Mauros D. Hinchey	114 John P Orzel	11A Ocna A Eupardo			144 Gary F O'Neill	15A Mark Whalen		
B X	18 Carl P Paladino Gregory J Edwards		30 Hany Wilson	48 Dan Denovan		(B) Jay Townsend	70 Joseph J DioGuardi		oli George K Phillips	110 Thomas W Libeus	118 Arthur Garrison	128 David H Guy	138 Matin E Smith	148 David E Harder			
EPENDENCE	10 Andrew M Cuoma Robert J Duffy		30 Harry Wilson	4C Enc T Schneiderman		Oc October	30 Krsten E Gillibrand		9C Maurce D Hinsbey	150 Thomas W Libeus	11C Arthur Garrison			140 David E Hander			
	1D Carl P Paladino Gregory J Edwards		30 Harry Wilson	40 Dan Donovan		(D Jay Townsend	20 Josoph J DioGuardi		10 George K Phillips	110 Thomas W Libeus	110 Arthur Garrison			140 David E Harder			
RAING FAMILIES	1E Andrew M Cuome Robert J Duffy		3E Thomas P DNapoli	4E Eric T Schneiderman		E Charles E Schumer	TE Kirsten E Gillibrand		iE Maurice D Hinchey		11E Donna A Luperdo		tiE Matin E Smith	14E TR Roberts			
	17 Howie Hawkins Gioria Mattera		3F Jula A Wilebrand			Cola Cola Clark	TF Cacile A Lawrence				Jason T Stokes						
G NO	10 Jammy McMillan						7G Joseph Hulf										
	1H Warren Redlich Alden Link	24 Charles Barron Eva M Doyle	3H John Geetani	4H Carl E Person	SH Ramon J Jimenez	Randy A Credico	3H John Clifton										
	11 Carl P Paladino Gregory J Edwards	FOR COLUMNS 1					71 Viva Morgan	Bruce Blakeman									ļ
RITE-IN	WRITE-IN	WRITE-IN	WRITE-IN	WRITE-IN	WR/TE-IN	WRITE-IN	WRITEIN	WR/TE-IN	WRITE-IN	WRITE-IN	WRITE-IN	WRITE-IN	WRITEIN	WRITE-IN	WRITE-IN		
FFICIAL BALLOT FI STRUCTIONS: Mark only with a writing instru- To visib to a painton writing in To visib to a periodo writing on To visib to a periodo writing on Any other marks or writing, or Any other marks or writing, or	ment provided by the e name is printed on the ame is not printed on to sal if any, that appears	Board of Elections his ballet fill in the ave this ballet write or sta on the back of the b	al C above or rest to mp his or her name i allot, fill in the oval C	the name of the condit to the space labeled "W that corresponds to yo	to-in" that appears ur vote.				DF C7081	u tear, or deface, on i oute. Erasures or or r wish to change your	oss outs may invelida	te all or pari of your b	alor. Prior to submitte	ng your ballot, if you m	on the ballot by making ensures ale a mistake in completing the ament ballot upon return of the	Ballot ID City of Bin E	D: 1026 inghamtos E.D.(s): 25



If you can't read the ballot effectively, you can't vote accurately

Instructions Mark the oval to the left of the name of your choice. The number of choices is listed for each contest. Do not mark the ballot

Tructions Mark the oval to the left of the name of your choice. To vote for a candidate whose name is not printed on the ballot, print the name clearly under the words 'Write-in', staying within the box. The number of choices is listed for each contest. Do not mark the ballot for more choices than allowed. You do not have to vote in every contest.

If you make a mistake, or want to change your vote, ask a poll worker for a new 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

ing)



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

If you can't find the correct marking location, you can't vote accurately

	YES	237 →		State State State		- be retained in office as JUDGE OF THE CIRCUIT
Michael J. Hogan	NO	238 →	• •	- 240	NO	COURT, COOK COUNTY JUDICIAL CIRCUIT?
			• •	242	YES	Stat JOHN E. MORRISSEY
Alan J. Greiman	YES	241 → 242 →	• •	244	NO	 be retained in office as JUDGE OF THE CIRCUIT COURT, COOK COUNTY JUDICIAL CIRCUIT?
			• •	246	YES	Stat RONALD C. RILEY
Mary Maxwell Thomas	YES NO	245 → 246 →	• •	248	NO	 be retained in office as JUDGE OF THE DIRCUI COURT, COOK COUNTY JUDICIAL CIRCUIT?
			• •	250	YES	Stat FRANCIS X. GOLNIEWICZ
Francis Barth	YES	249 → 250 →	• •	- 252	NO	 be retained in office as JUDGE OF THE CIRCUIT COURT, COOK COUNTY JUDICIAL DIRCUIT?
			•	254	YES	Shat MOSHE JACOBIUS
Stuart Allen Nudelman	YES	253 → 254 →	• •	- 256	NO	 be retained in office as JUDGE OF THE CIRCUIT COURT, COOK COUNTY JUDICIAL CIRCUIT?

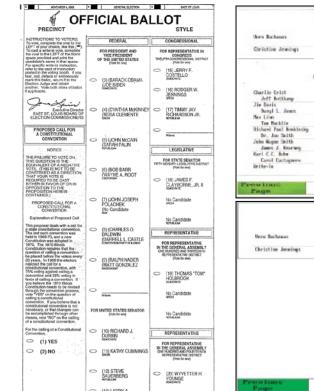


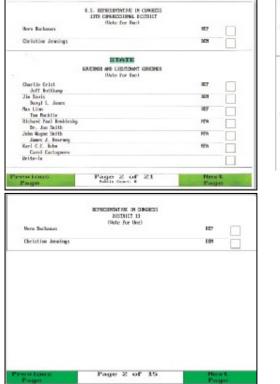
If you don't know how voting works, you can't vote accurately

REPUBLICAN PARTY PRIMARY ELECTION	DEMOCRATIC PARTY PRIMARY ELECTION
5th Congressional District	5th Congressional District
UNITED STATES SENATOR (Vote for One) Rand PAUL Stephen Howard SLAUGHTER James R. GOULD UNITED STATES REPRESENTATIVE in CONGRESS Sth Congressional District (Vote for One) Harold "Hal" ROGERS John BURK JR. ALL PRECINCTS	PRESIDENT of the UNITED STATES (Vote for One) MAILLEY Bernard "Bernle" SANDERS Hillary CLINTON Roque Rocky DE LA FUENTE "UNCOMMITTED" UNITED STATES SENATOR (Vote for One) Tom RECKTENWALD Grant T. SHORT Sellus WILDER Jim GRAY Rory HOULIHAN Jeff KENDER Ron LEACH STATE SENATOR 31st Senatorial District (Vote for One) Glann Martin HAMMOND Ray JONES
	ALL PRECINCTS



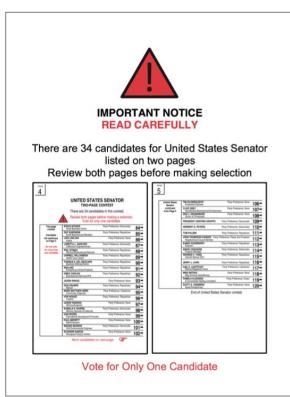
Make contest boundaries easy to see





(United States Senator (6 Year Term)	A★ '	B 🔬 ·	C &	D 5 ·	E Will *	F 🛞 '		H 🛵 ។ Ubertarian	
5	Senador de los Estados Unidos (Periodo de 6 Años)	Charles E Schumer	Jay Townsend	Charles E Schumer	Jay Townsend	Charles E Schumer	Colia Clark		Randy A Credico	
_	Vote for one Vote por uno	Jeens	feete	C .	Concella	Annual action		C RENT .		*1* O
		A ★ '	B 🔬 • Republican	independence	D 🕄 * Conservative	E Warking Families	F 🐲 •	Rent is 2 Damn	Libertarian	
	United States Senator	Kirsten E Gillibrand	Joseph J DioGuardi	Kirsten E Gillibrand	Joseph J DioGuardi	Kirsten E Gillibrand	Cecile A Lawrence			
6	(2 Year Unexpired Term) Senador de los	*64 0	1 00	8-6C O	1 960 O		97 O	Mild O	ker O	
0	Estados Unidos (Periodo Inconcluso de 2							Tax Revolt	Anti-Prohibition	
	Años) Vote for one Vote por uno							Bruce Blakeman		
									¥8 O	

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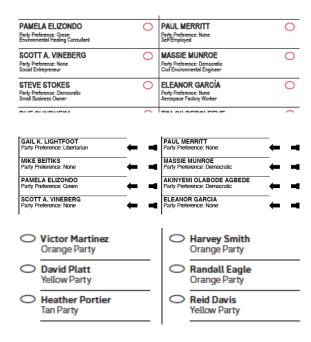


					_
your ballot. NO RED INK. If you make a mistake, ask for	a new ballot.	t of your choice. Use a blue or block		Ka	
PARTY-NOMINATED OF Only voters who disclosed a pre- registering to vote for the same o- candidate seeking the nominatio party for the Presidency or elect- committee may vote for hal can primary election, unless the part adopted a nucle to permit nonpart vote in its primary elections.	ference upon party as the n of any ion to a party didate at the	All voters, regardless of the party disclose a party preference, may office. The party preference, if an	vote for any	INATED AND BAR OFFICES hey dibload upon registration, or refus contrainte for a vater-mentional or room of any a condition for a vater-mentional of a statistic for a vater-mentional of a statistic for a statistic party appear a conditistic for a morparition office doe	al to artise fifice i sot ves of so not
PARTY NOMINATED OF	FICES	W	DTER NOMIN	ATED OFFICES	
PRESIDENT OF THE UNITE	D STATES		ST	ATE	
Presidential Preference			UNITED STAT	TEB SENATOR	
	Vote for One		u can shocae ard		e for C
WILLIE WILSON	0	MIKE BEITIKS	0	GAR MYERS Paty Fateroact Name	0
ROQUE DE LA FUENTE	0	Pady Profesora Xone Stap-shittens DedHillerney			
HILLARY CLINTON	0	PAMELA ELIZONDO Paty Patronice Gener Endermental Hading Consultant	0	PAUL MERRITT Paty Followice Name	0
HENRY HEWES	0				
KEITH JUDD	0	SCOTT A. VINEBERG Pady Podewax Note Social Determination	0	MASSIE MUNROE Paty Followar Demonte Of Entropyetal Entropy	0
MICHAEL STEINBERG					_
BERNIE SANDERS		STEVE STOKES Paty Patrona Desocrats	0	ELEANOR GARCIA Party Forfaceous Name Autopase Factory Worker	
Wrie-in	0	DUF SUNDHEIM	-	TIM OLDERALEEVE	_
		Paty Palewase Republicen Smill Durinssman Medialor	0	Party Partnesson News Partnesson News Partnesson Operator	0
		LING LING BHI Pady Patieness: Non Author	0	CLIVE OREY Paty Followare Nam Woodenfue Balterson Winter meur	0
		LORETTA L. SANCHEZ Pady Professor Desocratic California Congress research	0	DON J. GRUNDIMANN Paty Followsze New Dodz of Chapado	0
		PHIL WYMAN Paty Policence: Republican AlternepTacheuman/Farcher	0	PRESIDENT CRISTINA GRAPPO PatyPolicence Demonster	0
		JARRELL WILLIAMSON Paty Patrona: Republican Health Care Langer	0	HERBERT G. PETERS PatyPathence Demonds	0
		THOMAS G. DEL BEOCARD Pady Padrence: Tapatikan Budenu: Adormy/Valler	0	TOM PALZER Paty Followsce Repúblican	C
		RON UNZ PadyPodewca: Republican Entropress/MitterFullisher	0	JOHN THOMPSON PARKER Paty Fisherox: Pace and Fisedon Heighborhood Council Networ	0
		GREG CONLON Paty Patronic Republican Subsecura VAtc may CPA	0	KAREN ROSEBERRY Paly Faherson Papilikan Educator	0
		JASON KRAUS PatyProfessor Note	0	EMORY RODGERS Paty Faternar Demonts Properly Manager	0
		DON KRAMPE Paty Polineux: Republican Relied	0	GEORGE C. YANG Paly Followice De Allow Internal Statup (20)	0
		MARK MATTHEW HERD Pady Professor: Ubstanlar Connectly Organizar	0	JERRY J. LAWS PatyFollerson Repúblican	0
		VDN HOUGO PadyPreference Republican Teacher	0	GAIL K. LIBHTFOOT Paty Followsz: Libelaten Rainel Registered Name	0
		JASON HANANIA Paty Patronex Nove Atomy Tratemax	0	Witz-in	<

PRESIC AMER COUNTY OF SJ Instructions to Voters: • Use enty a bite et black babgeint pen to nat • You walk oncert the lead and tail et the an • To vote the a qualified write in candidate, with	EICIAL BALLOT ENTIAL PRIMARY ELECTION (CAN INDEPENDENT PARTY INTA CRUZ, TUESDAY, JUNE 7, 2016 Internet internetional and the internetion of the control internetion and internetication of the control internetion and internetication of the control internetion and internetication of the control internetion of a labeling historication of the control internetion of the labeling historication of the control internetion of the labeling history internetion of the control internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of the labeling history internetion of the labeling history internetion of the labeling internetion of the labeling history internetion of thistory internetion of the labeling history inter	Vote-Nominated Offices United States Senator Verter der Petilisert Genätors Reinigen States Reinigen States Tege Automa Derrende Tege Automa Derrende Tege Automa Derrende States States Automa Derrende Reinigen States Automa Derrende Tege Automa Derrende
Party-Nominated Offices Only ones who deviated optimizers a point registering to the office area party on the deviation analytic on the party moments and party on the other analytic optimum of the other and party and the other analytics of the private one party office the party and the other analytics of the private section. The shall be private and other a minimate party for party section.	Note: Naminate's and Nampartican Offices 65 years, anguesting of the and y advances the division gave neglection, or where it defines a party advances, dray, or dray and defines it a subscription of the state of the first state of the state of the state of the state of the state of the division of dray is the state of the state of the state of the state of the state division of the platest state of the state of the state of the state of the state of the state of the state of the state of the platest state of the state.	Budy Performance Republican EMORY RODCERS Party Proteinance Comercial Property Manager GEORGE c: YANG Party Performance Republican Homent Shang ECO
Party-Noninated Offices President of the United States of the United States of the United States of the United States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the United States Transformer States of the United States of the Unite	Please turn over to continue voting.	Karl A. Sharing and an and a second s



between voting choice and marking mechanism



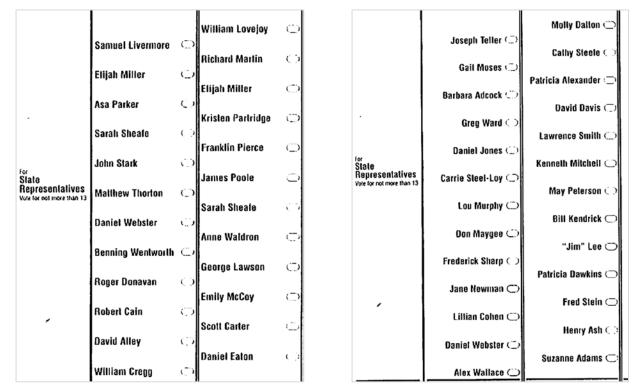
1 Fill in one oval	2 Second Choice Fill in one oval	3 Third Choice Fill in one oval
Orange Party	Orange Party	Orange Party
Luis Garcia Orange Party	C Luis Garcia Orange Party	Orange Party
Alex Wallace Purple Party	Alex Wallace Purple Party	O Alex Wallace Purple Party
C Eric Savoy Purple Party	C Eric Savoy Purple Party	C Eric Savoy Purple Party
Barbara Williams Tan Party	Barbara Williams Tan Party	Barbara Williams Tan Party
Lillian Cohen Lime Party	Lillian Cohen Lime Party	Lillian Cohen Lime Party
Ann Windsock	Ann Windsock Independent	Ann Windsock
Markos Miller Silver Party	Markos Miller Silver Party	Markos Miller Silver Party

City Council						
Rank up to 6 candidates. Mark no more than 1 oval in each column.	First choice 1st	2000 Choice 2nd	3uq Choice	fourth choice 4th	91 Fifth choice	919 Choice Choice
Valarie Altman Orange Party	0	0	0	0	0	0
George Hovis Yellow Party	0	0	0	0	0	0
Althea Sharp Purple Party	0	0	0	0	0	0
Mary Tawa Lime Party	0	0	0	0	0	0
Joe Li Tan Party	0	0	0	0	0	0
Phil Wilkie Independent	0	0	0	0	0	0

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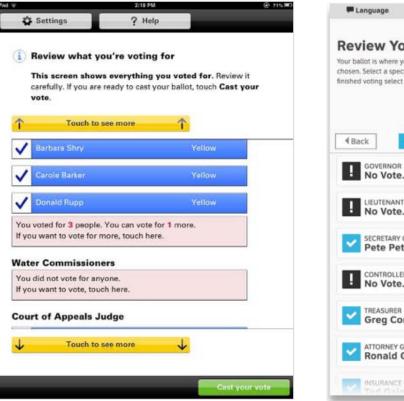


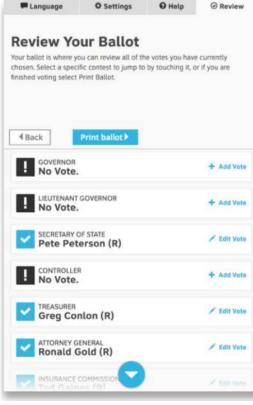
between voting choice and marking mechanism





Give voters control of all actions that make or change a ballot selection

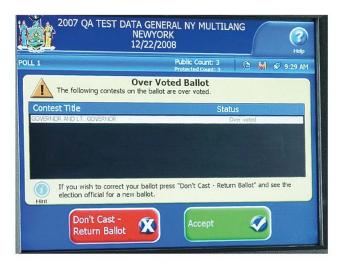




Don't force voters into problem-solving

🖨 Settings	? Help	Review your votes	
	nissioners . You can choose 2 more e more names		County Commissioners
Valarie Altman	•	llow	Vote for up to 5. You can choose 2 more.
Martin Schreiner	· Ta	in	
Eric Savoy	G	bid	
Touch here to wr	rite in another name		
Touch here to wr	rite in another name		
Touch here to wr	rite in another name		
Touch here to wr	rite in another name		
Touch here to wr	rite in another name		
Touch to se	e more names 🛛 🗸		
← Back	10 of 18	Next ->	Defecte hu

Don't force voters into problem-solving



You filled in too many ovals in	/08/2011 03:47:0 3 contests	
These votes will not count:		
In the contest for	You chose	You are allowed
Governor/Lt Governor	3 candidate	s 1
Representative in Congress	2 candidate	s 1
State Senator	2 candidate	s 1
Return your ballot Press RETURN to get your back and ask an inspector new one.	ballot Ign	ore message, Cast ballot ore this message and cast your ot with votes that will not int.

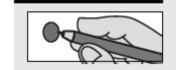


Clear, minimal, helpful instructions in the right place

GENERAL ELECTION INSTRUCTIONS (1) Mark only with a writing instrument provided by the Board of Elections. (2) To vote for a candidate whose name is printed on this ballot fill in the oval above or pext to the name of The propo the candidate. Reduce (3) To vote for a person whose name is not printed on served by this ballot write or stamp his or her name in the space Make th labeled "Write-in" that appears at the end of the row elected at for such office and fill in the oval corresponding with Prohibit the write-in space in which you have written in a serving of name. Shall this (4) To vote yes or no on a proposal, if any, that appears on the back of the ballot fill in the oval that corresponds to your vote. La propue (5) Any other mark or writing, or any erasure made on Reducir this ballot outside the voting squares or blank spaces ciudad pu provided for voting will void this entire ballot. · Hacer es (6) Do not overvote. If you select a greater number of la ciudad candidates than there are vacancies to be filled, your 2010 y; ballot will be void for that public office, party position Prohibir or proposal. electos de (7) If you tear, or deface, or wrongly mark this ballot, ¿Debe ap return it and obtain another. Do not attempt to correct mistakes on the ballot by making erasures or cross outs. Erasures or cross outs may invalidate all or part of your ballot. Prior to submitting your ballot, if you make a mistake in completing the ballot or wish to change your ballot choices, you may obtain and complete a new ballot. You have a right to a replacement ballot upon return of the original ballot. (8) After completing your ballot, insert it into the ballot The propo scanner and wait for the notice that your ballot has Disclosu been successfully scanned. If no such notice appears, expenditu seek the assistance of an election inspector. the outcor Ballot Ad INSTRUCCIONES DADA I A ELECCIÓN GENERAL 11.1.1

Prop

Instructions



Mark the oval to the left of the name of your choice.

To vote for a candidate whose name is not printed on the ballot, print the name clearly in the box labeled 'write-in', staying within the box.

Do not make any marks outside the spaces provided for voting. If you do, your ballot may not count.



Clear, minimal, helpful instructions in the right place

Instructions for Ranked Choice Voting

Making selections

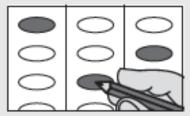
Fill in the oval...

Rank candidates in the order of your choice.

You may rank as many or as few candidates as you wish.

 In the 1st column for your first 1st choice. In the 2nd column for your 2nd choice.

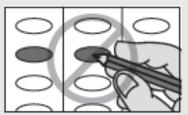
In the 3rd column for your 3rd choice, and so on



Fill in the oval completely.



No more than 1 oval in a column.



No more than 1 oval for a candidate.



Ballot design can help voters be successful

Follow proven election design principles

Meet voters' needs for easy interaction, plain language, and clear design

Test with voters

Thank you

Whitney Quesenbery

whitneyq@civicdesign.org @whitneyq

civicdesign.org @civicdesign

