Effective Designs for the Administration of Federal Elections

Section 3: Optical scan ballots

June 2007

Optical scan ballots

This section has three parts: (1) planning process information; (2) one-language ballot design best practices and samples; and (3) two-language ballot design best practices and samples.

Planning

The Planning section (pages 3.4–3.5) outlines how to incorporate resources into your ballot development and production process; in what areas those resources may be of assistance; and when those activities should occur. It also offers tips on possible challenges and opportunities. These suggestions apply to both one-language and two-language ballots.

Design

For both one-language (page 3.6) and two-language ballots (page 3.34), best practice samples are illustrated in full and by component. These components and samples are accompanied by production specifications and discussion notes.

Samples

Samples of the design best practices and components are applied to the various one-language ballots (page 3.22) and various two-language ballots (page 3.50). The variations include two ballot styles: a one-color version and a Chinese-language version.

Electronic versions of these files are available at www.eac.gov, and specific instructions on how to use the electronic files are included on pages 3.22 and 3.50. The electronic files are available in two formats, one of which can be edited.

Election officials are encouraged to partner with their vendors and production partners to review the voluntary design recommendations in this document as early as possible.

Translations

The sample Chinese text in this section has been professionally translated, but translations do not reflect a specific elections expertise. The translated Spanish text has been edited to support election terminology recommended in the EAC's "Glossary of Key Election Terminology, English-Spanish, 2007."

Voter audience

This section details solutions for voters able to use printed ballots. Ballot instructions, labels, and navigation are written in simple language to support comprehension by voters at a third-grade reading level.

Optical scan specifications are based on information design principles, primary research findings, and accessibility requirements cited in 2005 Voluntary Voter System Guidelines (VVSG) section 3.2.

Areas of further study

System solutions for alternative input/output variations (combining tactile, audio, and visual toolsets) and solutions for large-print ballots.

Suggestions for best practices

The general election voter information prototypes shown on the following pages are based on VVSG, Americans with Disabilities Act (ADA) guidelines, research findings, and information design principles.

- Emphasize voter needs over administrative and vendor requirements.
- Use simple language for all content. Studies show that clear and concise writing is beneficial to voters of all literacy levels. Rewriting instructions, ballot instructions, and voter information materials using simple language increases usability and, on the voter's behalf, accuracy.
- Use one language per ballot, which is recommended practice. To meet usability standards, display no more than two languages simultaneously.
- Use upper- and lowercase sans serif type, set left aligned at the sizes outlined in the specifications, for readability. Avoid setting text in a centered alignment. Avoid setting text in all capital letters. Minimize the number of fonts used.
- Set at a minimum of 12 points all ballot content voters will read. Given a choice between adequate type size (12 points) and fewer pages, ballots with 12-point type and more pages were found to be more usable than those with fewer pages and smaller type.
- Use color functionally and consistently. Color can draw the reader's attention and emphasize important information. The use of color cannot be the sole means of conveying information or making distinctions. Another noncolor mode must complement color use, such as contrast, icon, text style, etc. (see VVSG).
- When clarifying instructions and processes, use accurate diagrams to describe voting technology and equipment.
- Use instructional icons only. Universally recognized icons such as arrows are acceptable and encouraged.

Research findings

Detailed findings that support ballot design best practices can be found in section 6 and section 7.

Planning process

The planning table on the following page outlines additional resources and steps that can be taken to ensure that ballot content and design best address voter needs.

These recommendations are based on best practices in use in Cook County, Illinois, and the pilot test in Nebraska.

Planning goals

These additional resources can help ensure that:

- Content is easily understood by voters, including those with low vision and literacy issues.
- The visual organization of the content supports ease of use and confidence in the process.
- Any necessary translations are accurate and sensitive to cultural differences in language and expression.

Planning value by role/resource

- Simple-language expert ensures that instructions and other ballot content are written in the most effective manner to help all voters (not just low-literacy voters) understand and follow instructions, and feel confident that they have properly cast their ballots.
- Information designer organizes the ballot content—text, graphics, illustrations—in a manner that is clear, simple, and functional, and that supports and enhances the voter's comprehension of the content and voting process. (Note: The design field is very broad; it is important to work with a designer who has expertise in the organization and presentation of complex information.)
- Usability expert works with the information designer to develop review, testing, and revision processes that improve the ballot's overall effectiveness, accuracy, and usability.
- Translator ensures proper grammatical, syntactic, and structural character of the content, and appropriate use of local dialect variations. Accurate translations are vital for non-English-speaking voters, and online translations are often misleading, unclear, or simply wrong (for Spanish translations, see EAC document "Glossary of Key Election Terminology, English-Spanish, 2007").
- Cultural expert reviews translated material to ensure that the translations are
 accurate and culturally relevant, and that their visual presentation is appropriate.

Production steps	before election cycle	
Resources	Planning, design, and usability activities	Tips
1. Election Official	Use the current election to establish a baseline for future work. Get voter feedback before starting, not just afterward.	
	Establish an approval process/team. Determine who must sign off on improvements at each phase.	
2. Election Official	Choose an objective, professional resource to take ownership of information design challenges.	Whenever possible, hire a local person who will be able to meet with officials and the extended production team (vendors, printers, etc.).
	Simultaneously hire a designer and a usability professional who can offer additional feedback.	Provide the designer with poll worker training, as well as any feedback from voters or poll workers.
	Partner with a policy advisor who can help guide design improvements through the necessary legislative processes.	Provide the designer with a complete list of curren election documents and legal requirements.
3. Designer and Usability Expert	Review and become familiar with election design standards and recommendations.	
	Understand variance between EAC best practices and local requirements for poll worker and voter materials.	
4. Election Official	Estimate value of design improvements.	
	Gauge impact of the redesign process during the next election planning cycle.	
Resources during	election cycle	
Resources	Content development activities	Tips
Simple-Language Expert	Edit final English-language content for low-literacy voters.	
Translator	Translate content for non-English-speaking voters.	Understand the translator's requirements before the election: data formats, time line, etc.
		Have a third-party expert review the translated materials after the initial draft. Legal advisors may need to review the materials after simple language and design have been incorporated.
Alternative Language/ Cultural Expert	Review translated content in each alternative language for cultural relevancy.	Translation services may not be aware of possible cultural sensitivities of translated material.
Designer	Election official provides designer with final content for different materials, in English and other languages, after they have been reviewed by simple language and cultural experts.	

simple language and cultural experts.

Design: one language

On pages 3.7–3.21, design best practices for a general election one-language ballot are illustrated. Production specifications and discussion notes are provided—including typeface,* type size, leading, line weights, tint fills, and distances between elements.

The ballot content used in these samples was originally developed by the National Institute of Standards and Technology (NIST) to illustrate a "moderately complex" ballot. Although it is impossible to cover every ballot scenario, most general election ballot layout issues can be addressed using these designs.

Components

As illustrated on the following page, an optical scan ballot has four basic component content areas:

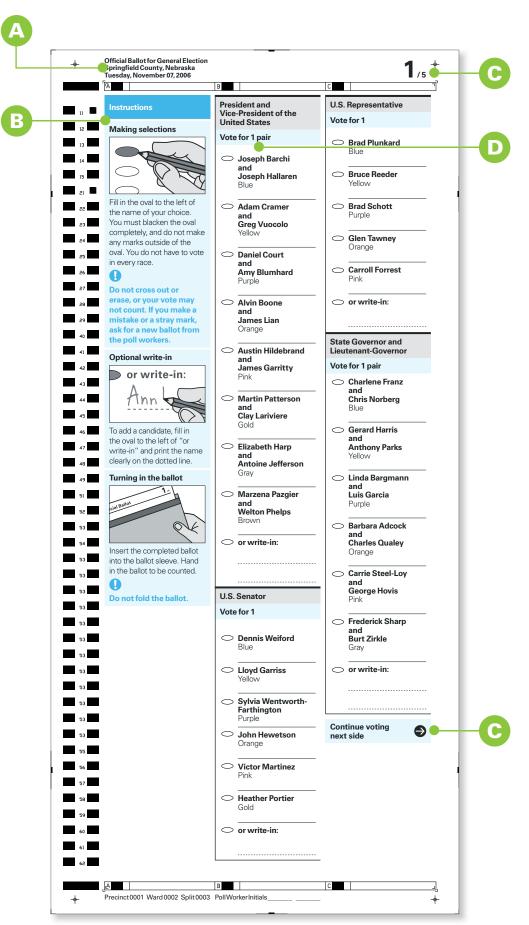
- A Election information (e.g., jurisdiction, general election, and date)
- Ballot instructions
- Ballot navigation, including page numbers and reminders to vote on the other side or go on to the next page
- D Questions, including contests, retentions, and ballot measures

Each of these components is illustrated at its full size, and production specifications are included. Specifications are numbered from 1 through 6.

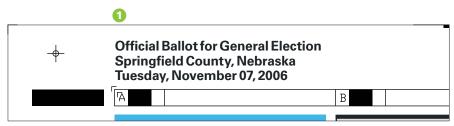
Designers can apply specifications in this section to other paper ballot formats, such as absentee, emergency, and primary election ballots.

^{*}The EAC does not endorse any specific product or vendor. The best practices illustrated throughout this document do not rely on specific software, products or vendors. For copyright reasons, the EAC cannot supply election officials with the fonts used in the InDesign files. They are available from numerous suppliers.

3.7 Optical scan ballots



A



Election information specifications

Information defining the specifics of the election should be placed above the left column of the face of every ballot page outside the area used by the voter and the scanner. Content should include the statement "Official Ballot" along with election type, location, and date. Local laws may require that additional information be included.

1 Information

On ballots with space constraints, election information may be set at a minimum size. For ballots with more available space, larger type is encouraged.

Minimum size type for all: Univers 65 Bold, size 10 pt., leading 11 pt., tracking -20, 100% black, left aligned.

Maximum size type for title: Univers 65 Bold, size 18 pt., leading 20 pt., tracking -20, 100% black, left aligned.

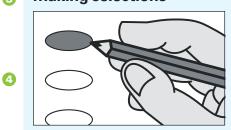
Maximum size type for location and date: Univers 65 Bold, size 12 pt., leading 14 pt., tracking -20, 100% black, left aligned.

Discussion

Though this is important content, it should not be set so large that it affects the amount of room for instructions and ballot content actually used by the voter.

1 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.

6

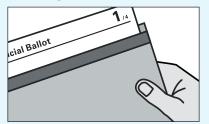
6

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 or write-in: Ann To add a candidate, fill in the gual to the left of "er

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.

Do not fold the ballot.

all 100% actual size

Ballot instruction specifications

Specifications for each instruction element are referenced by number below.

Main head

This header defines the complete instructions area for the voter.

Fill: 100% process cyan, 0.5" height, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% white, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

2 Background fill

3 pt. white line between background tint and main head. 3 pt. white line between each instruction.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type for each instruction.

Subhead

Begins 0.1" below top of fill.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

4 Illustration

Begins 0.1" below lowest baseline of title.

Size: 0.1" inset from column width on both sides; height determined by most effective display of illustration (typically 1" to 2").

Stroke: 0.5 pt. line, 100% black.

Instruction text

Begins 0.1" below bottom of illustration.

Type: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

6 Alerts

These should be used only for critical instructions, such as actions that may invalidate a voter's ballot. Begins 0.1" below lowest baseline of instruction content.

Attention icon: 0.25" diameter, 100% process cyan, set 0.1" from left edge of fill.

Type: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% process cyan, left aligned, set 0.1" from left edge of fill and 0.1" below Attention icon.

Discussion

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review.

Illustrative diagrams that accurately reflect the ballot type and equipment further clarify instructions and processes.

These illustrations are available at www.eac.gov.

Informational icons are used to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

Embedding ballot instructions in ballots supports greater voting focus and autonomy for users, as does the use of simple language, numbered steps, and clear, specific illustrations.

Ballot instructions, running either vertically or horizontally, must be self-contained and separated from contest data. Vertical instruction treatments **cannot** share column space with contests—test voters often overlooked races located immediately beneath vertical instructions. Horizontal instructions running atop vertically placed contests in columns require the voter to read across (instructions) and then down-up (contests), which adds a slight learning challenge compared to an all-vertical layout.

		С		1 /5	
2 3	Continue voting next side	€	4		
	Continue voting next page	€			
	Thank you for voting! Please turn in your finished ballot				
i	all 100% actual size				

Design

3.12 Optical scan ballots

C

Ballot navigation

One language

C

Ballot navigation specifications

Specifications for each instruction element are referenced by number below.

Page numbering

Current and total page numbers should be placed in the top right corner of each face of every ballot page.

Current page type: Univers 65 Bold, size 36 pt., tracking -20, 100% black.

Total page type: Univers 65 Bold, size 12 pt., tracking -20, 100% black.

2 Instruction fill

Navigational instructions should be placed at the end of the final column on each ballot face, to tell the voter what to do next.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

Instruction content

Begins 0.1" below top of fill.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

4 Arrow

Use the Arrow icon to direct the voter to another location on the ballot.

Arrow icon: 0.25" diameter, 100% black, set 0.1" from right edge of fill, centered between top and bottom of fill.

Discussion

These ballot navigation guides help the voters through the ballot, telling them where they are in the process and where to go next.

Ballot pages should be numbered with large, bold numbers.

Informational icons such as arrows and exclamation points (next page) can be used to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov.

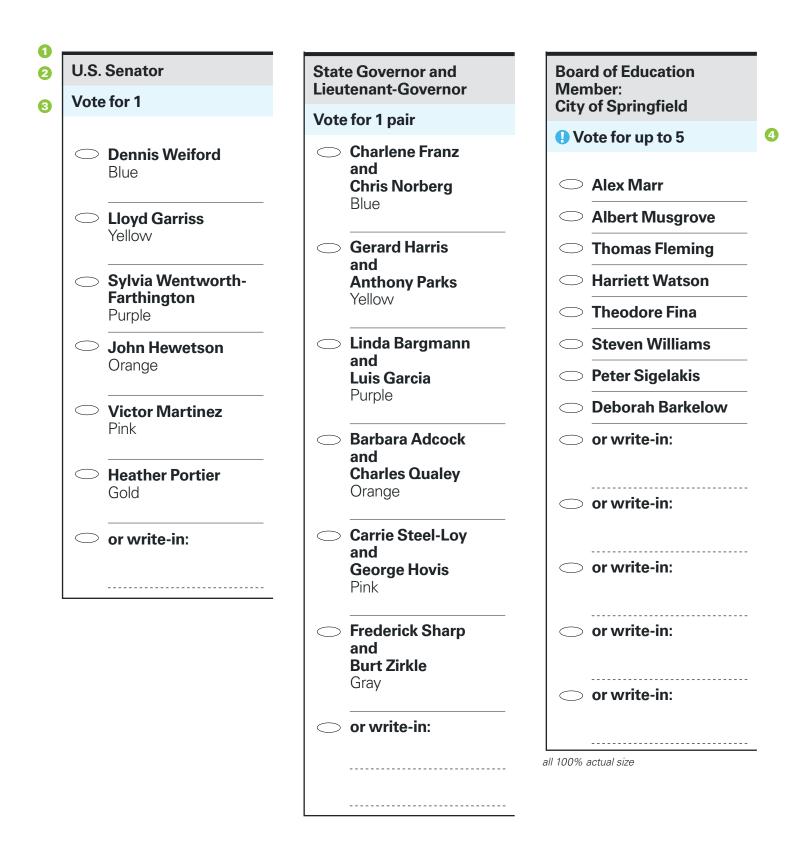
The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review.

One language

Contest questions

D



Contest question specifications

Contest question components include borders that separate each contest, titles, special instructions, candidate/ticket information, and choices.

Border

This border defines the top, left, and bottom sides of the contest component.

Top line: 3.0 pt. line, 100% black, extends full width of the column.

Left line: 1.0 pt. line, 100% black.

Bottom line: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

2 Contest title

This header defines each contest question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

Contest instructions

This area defines each contest's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

Output Service A structure A structure

When new or modified instructions are introduced, they should be called out to alert the voter. These are set identically to standard contest instructions, with the addition of an Attention icon.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Attention icon: 0.15" diameter, 100% process cyan, set 0.1" from left edge of fill, centered between top and bottom of fill.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of icon, centered between top and bottom of fill.

Discussion

Informational icons such as exclamation points and arrows are offered to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov.

The use of political party icons is not encouraged, as literacy experts and design professionals believe they simply confuse many voters.

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

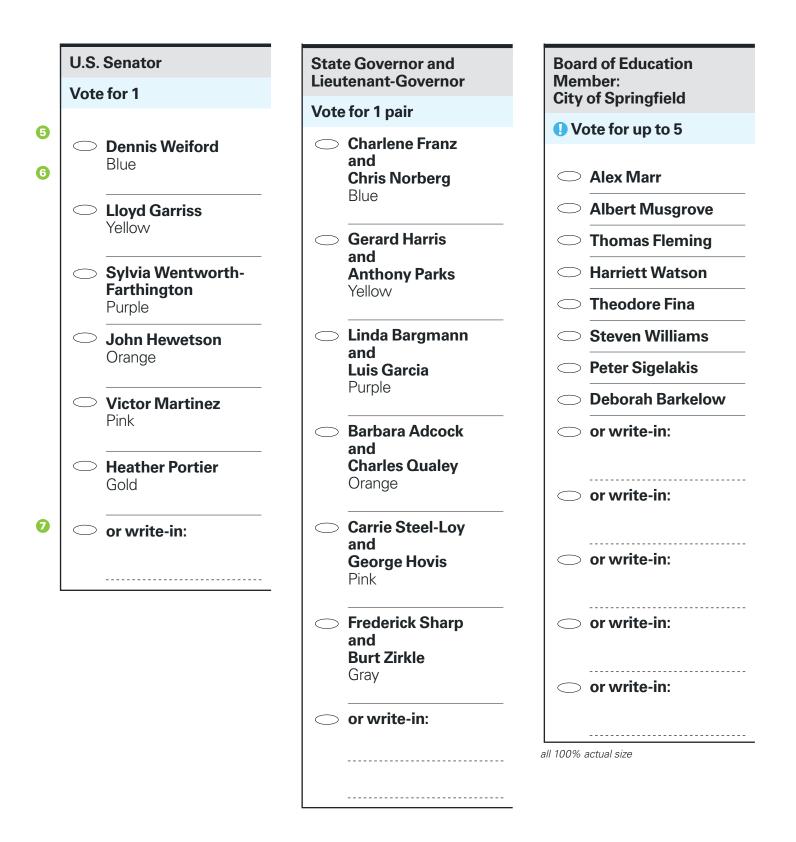
Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review.

The phrase "Vote for 1 pair" is recommended best practice by simple language experts.

One language

Contest questions, cont.

D



Contest question specifications, continued

6 Candidate information

Candidate names section begins no less than 0.1" below bottom of instructions fill; on ballots with set selection locations, the distance may need to be greater. Subsequent names should begin 0.1" below separation line of previous candidate. Names should be set as close as possible to the selection location.

Name type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Party type: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned. On contests with a two-person ticket, the word "and" should be placed alone on a separate line between the two candidate names.

6 Separation line

Each candidate option should be followed by a line, even if it is the final option in a particular contest. Line should be placed no less than 0.1" below the lowest baseline of candidate information; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following candidate name, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of column area allowed for candidates.

🕖 Write-in

Begins 0.1" below final line of previous candidate. Write-in line should be placed no less than 0.3" below lowest baseline of type; on ballots with set selection locations, the distance may need to be greater.

On contests with a two-person ticket, a second write-in line should be added. Line should be placed no less than 0.3" below the first. Spacing before both lines should be equal.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Write-in line: 0.5 pt. line, dashed 4 pt./4 pt., 100% black, extends full width of column area allowed for candidates.

Discussion

All candidates in any given contest should be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the candidate/ ticket name as shown on page 3.16. 0 2

3

4

5 6 D

Judge Retention: State Supreme Court		
Vote yes or no		
Keep Elmer Hull as Associate Justice of the State Supreme Court?		
○ No		
Judge Retention: State Supreme Court		
Vote yes or no		
Keep Susan Esquer as Associate Justice of the State Court of Appeals, 5th Appellate District, Division 2?		
◯ Yes		
◯ No		
Judge Retention: State Supreme Court		
Vote yes or no		
Keep Rita Zheng as Associate Justice of State Family Court, 3rd District? Yes		
◯ No		

One language

Retention question specifications

Retention question components include borders that separate each question, titles, special instructions, the question, and the choices.

Border

This border defines the top, left, and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the column.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

2 Retention title

This header defines each retention question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

3 Retention instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

4 Retention content

Presents the question clearly to the voter. The judge's name should be bold to add emphasis. Begins no less than 0.1" below bottom of instructions fill.

Content type: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

Name type: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

5 Retention selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location.

D

Option type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

6 Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of column area allowed for selection options.

Discussion

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review.

All names in any given retention question should be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the judge's name as shown on page 3.18.

Ballot Measure 101: Open Primaries

Vote yes or no

Requires primary elections where voters may vote for any state or federal candidate regardless of party registration of voter or candidate. The two primary-election candidates receiving most votes for an office, whether they are candidates with no party or members of same or different party, would be listed on general election ballot. Exempts presidential nominations. Fiscal Impact: No significant net fiscal effect on state and local governments.

E	5
C	3

0

2

 $\supset No$

Yes

Ballot Measure 106: Limits on Private Enforcement of Unfair Business Competition Laws

Vote yes or no

Allows individual or class action "unfair business" lawsuits only if actual loss suffered; only government officials may enforce these laws on public's behalf. Fiscal Impact: Unknown state fiscal impact depending on whether the measure increases or decreases court workload and the extent to which diverted funds are replaced. Unknown potential costs to local governments, depending on the extent to which diverted funds are replaced.

\bigcirc	Yes

 \bigcirc No

One language

D

Ballot measure specifications

Ballot measure components include borders that separate each question, titles, instructions, the question, and the choices.

Border

This border defines the top, left, and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the ballot measure area.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the ballot measure area; placed 0.1" below last content in ballot measure area.

2 Ballot measure title

This header defines each ballot measure question; it begins directly below the top border.

Fill: 15% black, extends full width of the ballot measure area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

8 Ballot measure instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the ballot measure area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill, centered between top and bottom of fill.

4 Ballot measure content

Presents the ballot measure question clearly to the voter; it begins no less than 0.1" below bottom of instructions fill, set 0.1" from left border. In a two-column ballot measure area, space for text should extend to 0.1" from the right edge of the ballot measure area. In a three-column ballot measure area, the space for text should extend no wider than 6".

Content type: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

Ballot measure selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location, ideally in the leftmost column of the ballot measure area.

Option type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

6 Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of ballot measure area allowed for selection options.

Discussion

A primary voter criticism of ballots is the length and complexity of ballot measure questions. It is imperative that these questions be written in the simplest language possible. Many jurisdictions also provide summaries.

The typesetting of the ballot measure text is critical. Too many or too few characters per line inhibit legibility and comprehension. The goal should be 40– 60 characters per line. Research indicates that many users find line lengths of more than 60 characters or less than 20 characters hard to read.

There is a direct relationship between type size and line spacing (leading). Lines of type that are too close together inhibit legibility and comprehension (as do lines that are too far apart). Ballot measure content in these best practices are set at 12 points, with 2 points of leading.

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review.

Samples: one language

Optical scan ballot design best practices are applied to one-language variations on pages 3.23–3.33. The variations include two ballot styles, a one-color version and an Asian-language version.

Specifications that vary from those outlined previously are included. The samples illustrate the flexibility of the design best practices.

The sample Chinese text in this section has been professionally translated, but translations do not reflect a specific elections expertise.

Electronic files

The electronic files that were used to create these best practices are available at www.eac.gov.

They are provided in two formats: Acrobat (.pdf) and InDesign (.indd).*

Each item has a unique identification number and file name. For example, the Acrobat file of the illustration on the next page is "OpScan_1L_VersionA.pdf."

How to work with the samples and electronic files

The Acrobat files can be printed on an office printer (depending on paper size), or by a local vendor with digital printing capabilities (printing firms and copy shops often have digital printing capabilities). Printed versions of these samples will serve as an important reference during the ballot design and production process.

InDesign files are template files that can be edited. The illustrative diagrams used in the InDesign files are also available at www.eac.gov. These files end with ".eps" and can also be edited. Access to Adobe InDesign page layout software and to software that can edit .eps files (e.g., Adobe Illustrator) is necessary. Working with a designer who has access to—and expertise in—these software programs is recommended.

Alternatively, these items can be recreated in other page layout programs using the production specifications provided on pages 3.6–3.21; the Acrobat .pdf files as a visual guide; and, if appropriate, the illustration files provided. Using nonlayout programs, such as those commonly used to write text-only documents, is not appropriate or recommended.

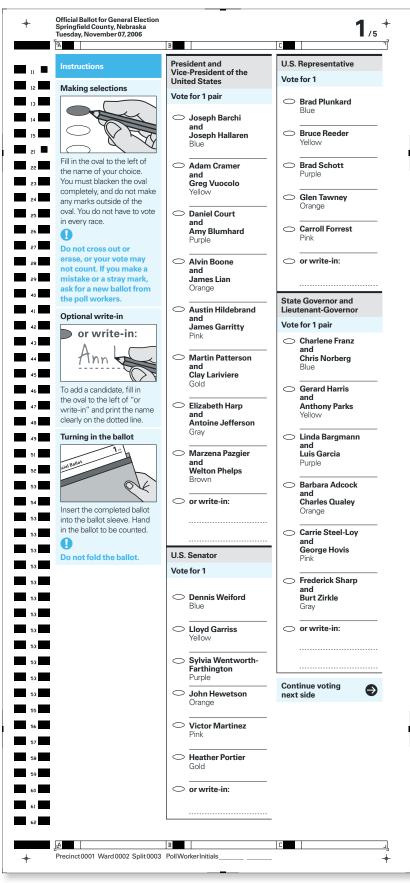
^{*}The EAC does not endorse any specific product or vendor. The best practices illustrated throughout this document do not rely on specific software, products, or vendors. For copyright reasons, the EAC cannot supply election officials with the fonts used in the InDesign files. They are available from numerous suppliers.

3.23 Optical scan ballots

Samples

One language

Version A



File name

OpScan_1L_VersionA

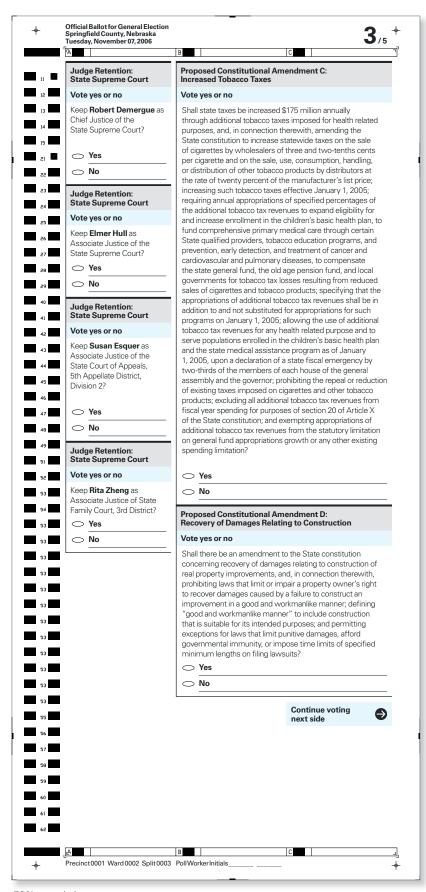
See pages 3.8–3.21 for detailed production specifications.

3.24 Optical scan ballots

Samples

One language

Version A



File name

OpScan_1L_VersionA

See pages 3.8–3.21 for detailed production specifications.

Samples

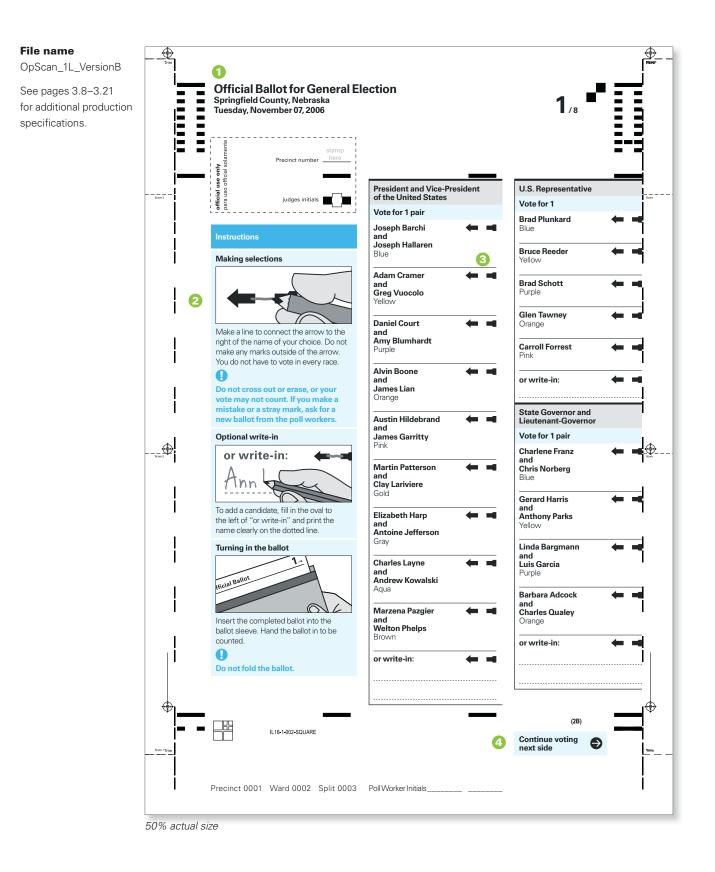
One language

Official Ballot for General Election Springfield County, Nebraska Tuesday, November 07, 2006 5/5 В C Ballot Measure 111: Revenue Bonds for Renovation of Madison County Jail Facilities Vote ves or no Directs the Madison County Public Safety Authority, a building authority incorporated by Madison County and the City of Ijamsville pursuant to Section 346.27 of the State Code, for the purpose of acquiring, destroying, demolishing, improving, enlarging, equipping, furnishing, repairing, maintaining and operating one or more public buildings for the joint use of the County, the City or any school district which is part of the County, to issue its revenue bonds in an amount not exceeding \$29,700,000 for the purpose of acquiring, constructing, furnishing, equipping, renovating and expanding existing jail facilities for the joint use of the County and the City. ◯ Yes ◯ No Ballot Measure 114: Financing for Mass Transit Vote ves or no Shall regional transportation district taxes be increased \$158.34 million annually and by whatever additional amounts are raised annually thereafter by increasing the rate of sales tax levied by the district by four-tenths of one percent, from the current six-tenths of one percent to one percent commencing January 1, 2005 and, in connection therewith, shall regional transportation district debt be increased \$3.477 billion, with a repayment cost of \$7.129 billion with all proceeds of debt and taxes to be used and spent for the construction and operation of a fixed guide way mass transit system, the construction of additional park-n-ride lots, the expansion and improvement of existing park-n-ride lots, and increased bus service, including the use of smaller buses and vans and alternative fuel vehicles as appropriate, as specified in the transit expansion plan adopted by the board of directors of the district on or before April 22, 2004 and shall debt be evidenced by bonds, notes, or other multiple-fiscal year obligations including refunding bonds that may be issued as a lower or higher rate of interest and including debt that may have a redemption prior to maturity with or without payment of a premium, payable from all revenues generated by said tax increase, federal funds, investment income, public and private contributions, and other revenues as the board may determine, and with such revenues raised by the sales tax rate increase and the proceeds of debt obligations and any investment income on such revenues and proceeds being exempt from the revenue and spending restrictions contained in section 20 of Article X of the State constitution until such time as all debt is repaid when the rate of tax will be decreased to that amount necessary for the continued operation of the system but not less than six-tenths of one percent?' ◯ Yes O No Thank you for voting! Please turn in your finished ballot A В Precinct0001 Ward0002 Split0003 PollWorkerInitials 4

File name

OpScan_1L_VersionA

See pages 3.8–3.21 for detailed production specifications.



Version B

Version B specifications

Alterations to the specifications noted on pages 3.8–3.21 are noted below.

Election information

If space allows, the election information component may be made larger so the voter can easily identify it. See page 3.9 for more information on this component.

2 Voting instructions

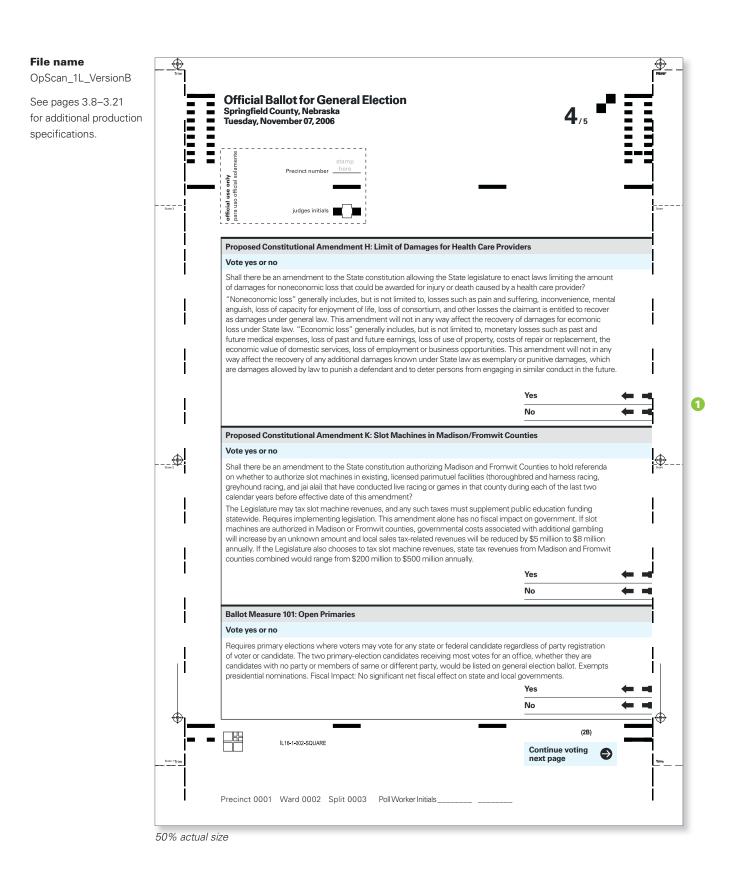
Both text and illustrations of the voting instructions should be developed to correspond precisely with the details of your particular ballot. See page 3.11 for more information about this component.

3 Variations in selection method

On some ballot types, the selection location is to the right of the candidate's name. In these cases, place the selection options 0.1" from the left border of the column.

4 Ballot navigation

In certain circumstances, navigation instructions may not be allowed in "active" or "live" areas of the ballot. In these cases, place the instructions as close to the bottom of the rightmost column as permitted.



Version B specifications, continued

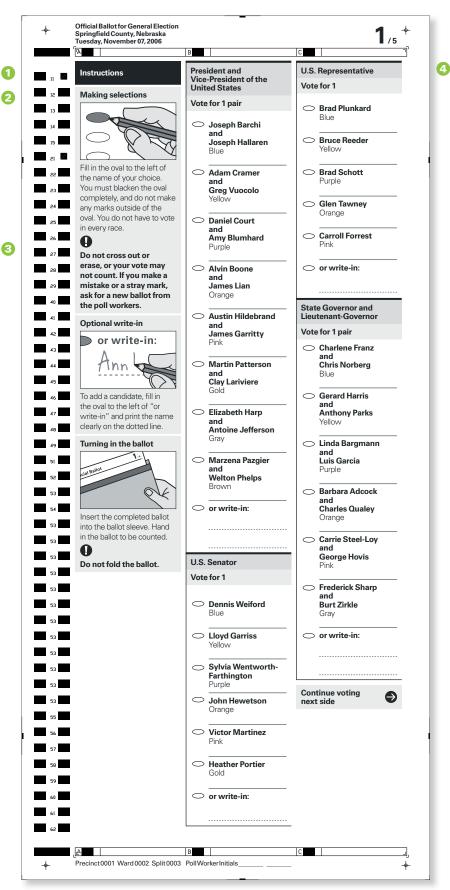
Alterations to the specifications on pages 3.8–3.21 are noted below.

1 Ballot measure selection options

On some ballot types, the selection options for multiple-column questions are placed only in the rightmost column of the ballot measure area. In these cases, the separation lines should extend only the width of that column. See page 3.11 for more information about this component. 3.30 Optical scan ballots

Samples

One language



File name

OpScan_1L_1Color

See pages 3.8–3.21 for additional production specifications.

One-color version specifications

If circumstances dictate that ballots be printed in only one color, certain adjustments should be made to the specifications.

Instruction title

Rather than process cyan, this title should be 100% black.

2 Instructional fills

For all background fills, change from process cyan to 10% black. This includes the fills used with all ballot instructions, question instructions, and all navigational instructions.

8 Attention icons

Rather than process cyan, all Attention icons should be 100% black. This includes icons for critical ballot instructions, as well as special question instructions.

Question titles

To create appropriate contrast with question instructions, question title fills should be 20% black, rather than the 15% black used on two-color ballots.



File name

OpScan_1L_Asian

See pages 3.8-3.21 for additional production specifications.

Asian language versions

When single-language ballots are produced with Asian languages, the following areas need additional consideration:

Typeface choices

Non-Western typefaces should be selected on the basis of simplicity, compatibility with the Univers type family, and cultural appropriateness. In the application shown, LeHei Pro is used for Chinese.

2 Instructional illustrations

Make sure that instructional illustrations accurately reflect the language being used on the specific ballot.

📀 Candidate names

All ballot text should be translated, and candidate and political party names transliterated.

4 Language indication

Though all poll workers are assumed to speak English, not all will be able to identify the language on a non-English ballot. Non-English ballots should include this block to identify the language. The block should be placed near the bottom right-hand corner of the ballot, as far from ballot content as possible.

Fill: 10% process cyan, extends full width of one column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, center aligned, centered between top and bottom of fill.

Discussion

Translators ensure proper grammatical, syntactic, and structural character of the content and appropriate use of local dialect variations. Obviously, accurate translations are vital for non-Englishspeaking voters. Online translations are often misleading, unclear, or simply wrong. The EAC can provide some model translations.

A cultural expert can review translated material to ensure that the translations are accurate and culturally relevant, and that their visual presentation is appropriate.

Depending on State or local law, transliteration of candidate names into the appropriate Asian characters may or may not be required. When transliterating names, consultation with a language expert is recommended. Care should be taken to use the most standard characters, and make sure that overall there are neither overtly positive nor overtly negative meanings in the sound-based characters.

The sample shown on page 3.32 has the candidate names transliterated into Chinese.

Design: two languages

On pages 3.35–3.49, design best practices for a general election two-language ballot are illustrated. Production specifications and discussion notes are provided—including typeface,* type size, leading, line weights, tint fills, and distances between elements.

The ballot content used in these samples was originally developed by NIST to illustrate a "moderately complex" ballot. Although it is impossible to cover every ballot scenario, most general election ballot layout issues can be addressed using these designs.

Components

As illustrated on the following page, an optical scan ballot has four basic component content areas:

- A Election information (e.g., jurisdiction, general election, and date)
- Ballot instructions
- Ballot navigation, including page numbers and reminders to vote on the other side or go on to the next page
- D Questions, including contests, retentions, and ballot measures

Each of these components is illustrated at its full size, and production specifications are included. Specifications are numbered from **1** through **6**

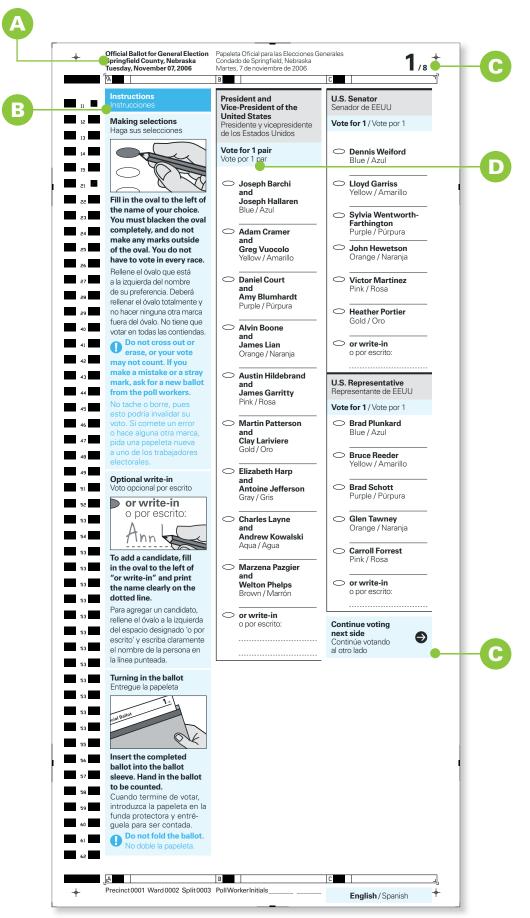
Designers can apply specifications in this section to other paper ballot formats, such as absentee, emergency, and primary election ballots.

^{*}The EAC does not endorse any specific product or vendor. The best practices illustrated throughout this document do not rely on specific software, products, or vendors. For copyright reasons, the EAC cannot supply election officials with the fonts used in the InDesign files. They are available from numerous suppliers.

3.35 Optical scan ballots

Design

Two languages



2.26	Ontical acon ballata	Design		A Election information
3.36	Optical scan ballots	Design	Two languages	Election information
	0			
		al Ballot for General Electic gfield County, Nebraska lay, November 07, 2006	n Papeleta Oficial para Condado de Springfie Martes, 7 de noviemi	
	Ā		В	С

Election information specifications

Information defining the specifics of the election should be placed above the left column of the face of every ballot page outside the area used by the voter and the scanner. Content should include the statement "Official Ballot," along with election type, location, and date. The second language should be to the right of the first, in line with the second column. Local laws may require that additional information be included.

Election information

On ballots with space constraints, election information may be set at a minimum size. For ballots with more available space, larger type is encouraged.

Minimum size type for all, Language One: Univers 65 Bold, size 10 pt., leading 11 pt., tracking -20, 100% black, left aligned.

Minimum size type for all, Language Two: Univers 45 Light, size 10 pt., leading 11 pt., tracking -20, 100% black, left aligned.

Maximum size type for title, Language One: Univers 65 Bold, size 18 pt., leading 20 pt., tracking -20, 100% black, left aligned.

Maximum size type for title, Language Two: Univers 45 Light, size 18 pt., leading 20 pt., tracking -20, 100% black, left aligned.

Maximum size type for location and date, Language One: Univers 65 Bold, size 12 pt., leading 14 pt., tracking -20, 100% black, left aligned.

Maximum size type for location and date, Language Two: Univers 45 Light, size 12 pt., leading 14 pt., tracking -20, 100% black, left aligned.

Language Two information should be set no less than 0.2" directly to the right of the longest Language One line of type.

Discussion

Though this is important content, it should not be set so large that it affects the amount of room left for instructions and ballot content actually used by the voter. Design

Ballot instructions

Instructions Instrucciones

2 3

Making selections Haga sus selecciones

4

6



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.

Rellene el óvalo que está a la izquierda del nombre de su preferencia. Deberá rellenar el óvalo totalmente y no hacer ninguna otra marca fuera del óvalo. No tiene que votar en todas las contiendas.

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.

6

No tache o borre, pues esto podría invalidar su voto. Si comete un error o hace alguna otra marca, pida una papeleta nueva a uno de los trabajadores electorales.

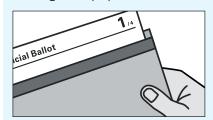
Optional write-in Voto opcional por escrito



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

Para agregar un candidato, rellene el óvalo a la izquierda del espacio designado 'o por escrito' y escriba claramente el nombre de la persona en la línea punteada.

Turning in the ballot Entregue la papeleta



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

Cuando termine de votar, introduzca la papeleta en la funda protectora y entréguela para ser contada.

Do not fold the ballot. No doble la papeleta.

all 100% actual size

Ballot instruction specifications

Specifications for each element in a section are referenced by number below.

🚺 Main head

This header defines the complete instructions area for the voter.

Fill: 100% process cyan, 0.5" height, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% white, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% white, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

2 Background fill

3 pt. white line between background tint and main head. 3 pt. white line between each instruction.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type for each instruction.

Subhead

Begins 0.1" below top of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages.

4 Illustration

Begins 0.1" below lowest baseline of title.

Size: 0.1" inset from column width on both sides; height determined by most effective display of illustration (typically 1" to 2").

Stroke: 0.5 pt. line, 100% black.

Instruction text

Begins 0.1" below bottom of illustration.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Space between languages should be 0.1".

6 Alerts

These should be used only for critical instructions, such as actions that may invalidate a voter's ballot. Begins 0.1" below lowest baseline of instruction content.

Attention icon: 0.25" diameter, 100% process cyan, set 0.1" from left edge of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% process cyan, left aligned, set 0.1" from left edge of fill and 0.1" below Attention icon.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% process cyan, left aligned, set 0.1" from left edge of fill.

Space between languages should be 0.1".

Discussion

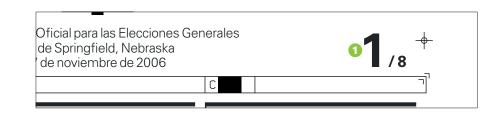
The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Illustrative diagrams that accurately reflect the ballot type and equipment further clarify instructions and processes.

Informational icons are used to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

Embedding ballot instructions in ballots supports greater voting focus and autonomy for users, as does the use of simple language, numbered steps, and clear, specific illustrations. Ballot instructions, running either vertically or horizontally, must be self-contained and separated from contest data. Vertical instruction treatments **cannot** share column space with contests—test voters often overlooked races located immediately beneath vertical instructions. Horizontal instructions running atop vertically placed contests in columns require the voter to read across (instructions) and then down-up (contests), which adds a slight learning challenge compared to an all-vertical layout.

C



 Continue voting next side Continúe votando al otro lado

Continue voting

next page Continúe votando en la próxima página

Thank you for voting! Please turn in your finished ballot ¡Gracias por votar! Entregue su papeleta a un trabajador electoral

all 100% actual size

Ballot navigation

Ballot navigation specifications

Specifications for each instruction element are referenced by number below.

Page numbering

Current and total page numbers should be placed in the top right corner of each face of every ballot page.

Current page type: Univers 65 Bold, size 36 pt., tracking -20, 100% black.

Total page type: Univers 65 Bold, size 12 pt., tracking -20, 100% black.

2 Instruction fill

Navigational instructions should be placed at the end of the final column on each ballot face, to tell the voter what to do next.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender of type, and 0.1" below lowest baseline of type.

Instruction content

Begins 0.1" below top of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

4 Arrow

Use the Arrow icon when directing the voter to another location on the ballot.

Arrow icon: 0.25" diameter, 100% black, set 0.1" from right edge of fill, centered between top and bottom of fill.

Discussion

These ballot navigation guides help move voters through the ballot, telling them where they are in the process and where to go next.

Ballot pages should be numbered with large, bold numbers to aid in ballot completion.

Informational icons such as arrows and exclamation points (next page) are offered to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

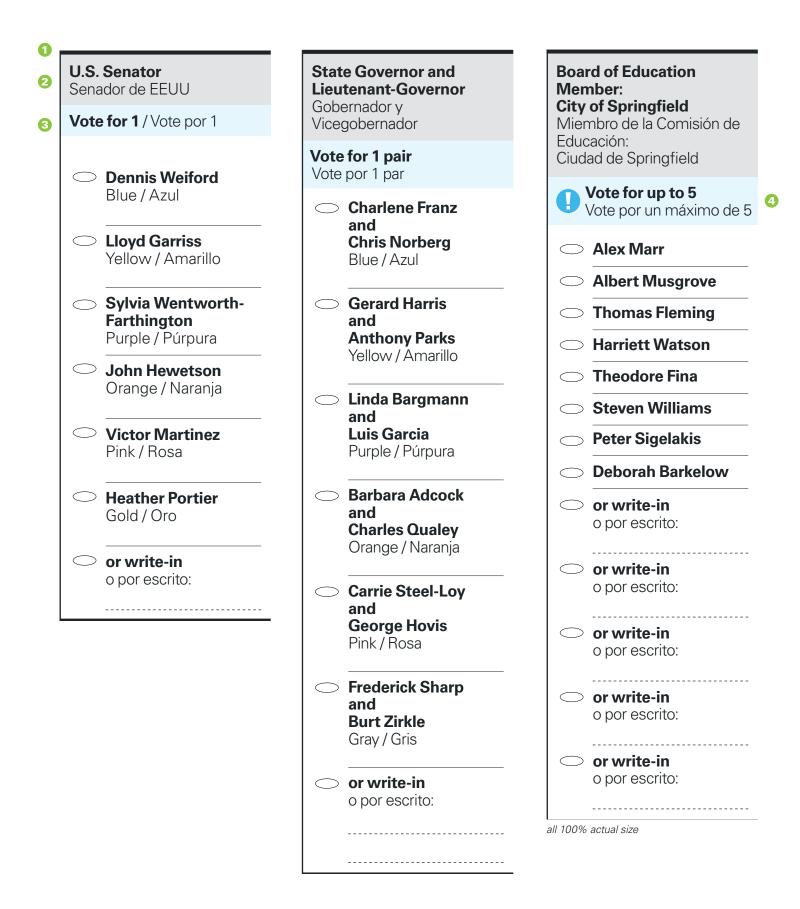
These informational icons are available at www.eac.gov.

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review. Design

Two languages

Contest questions



Contest question specifications

Contest question components include borders that separate each contest, titles, special instructions, candidate/ticket information, and choices.

Border

This border defines the top, left, and bottom sides of the contest.

Top: 3.0 pt. line, 100% black, extends full width of the column.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

2 Contest title

This header defines each contest question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

Contest instructions

This area defines each contest's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

Opecial instructions

When new or modified instructions are introduced, they should be called out to alert the voter. These are set identically to standard contest instructions, with the addition of an Attention icon.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Attention icon: 0.15" diameter, 100% process cyan, set 0.1" from left edge of fill, centered between top and bottom of fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of icon.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of icon.

Do not add additional space between languages. Type is centered between top and bottom of fill.

Discussion

Informational icons such as exclamation points and arrows are offered to draw attention to unique or important areas of the ballot or to improve the voter's ability to scan dense information.

These informational icons are available at www.eac.gov.

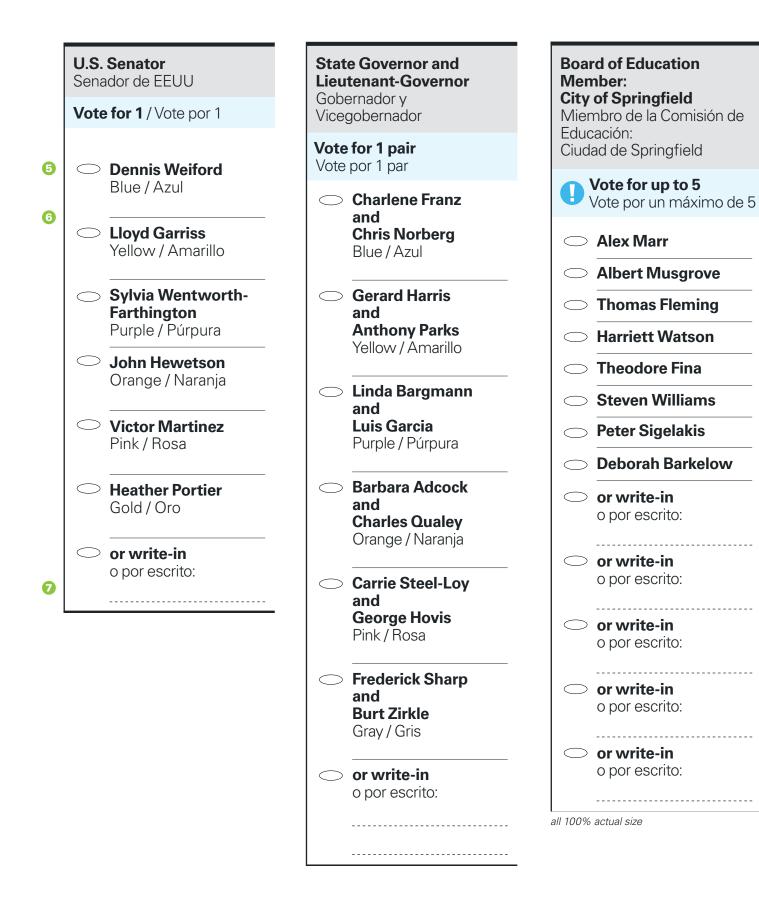
The use of political party icons is not encouraged, because literacy experts and design professionals believe they simply confuse many voters.

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

Depending on the printer, paper used, and other production variables, the percentages specified for fills (e.g., 10% process cyan) may need to be adjusted. The vendor should provide a test sample for review. Design

Two languages

Contest questions, cont.



Contest question specifications, continued

Candidate information

First name should begin no less than 0.1" below bottom of instructions fill; on ballots with set selection locations, the distance may need to be greater. Subsequent names should begin 0.1" below separation line of previous candidate. Names should be set as close as possible to the selection location. On contests with a two-person ticket, the word "and" should be placed alone on a separate line between the two candidate names.

Name type: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Party type: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

6 Separation line

Each candidate option should be followed by a line to clearly define it, even if it is the final option in a particular contest. Line should be placed no less than 0.1" below the lowest baseline of candidate information; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following candidate name, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of column area allowed for candidates.

🕖 Write-in

Begins 0.1" below final line of previous candidate. Write-in line should be placed no less than 0.3" below lowest baseline of type; on ballots with set selection locations, the distance may need to be greater.

On contests with a two-person ticket, a second write-in line should be added. Line should be placed no less than 0.3" below the first. Spacing before both lines should be equal.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages.

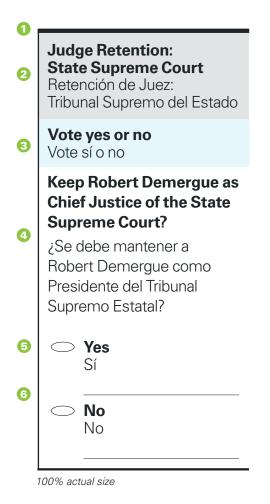
Write-in line: 0.5 pt. line, dashed 4 pt./4 pt., 100% black, extends full width of column area allowed for candidates.

Discussion

All candidates in any given contest should be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Place the selection oval to the left of the candidate/ ticket name as shown on page 3.44.

D



Two languages

Retention question specifications

Retention question components include borders that separate each question, titles, special instructions, the question, and the choices.

Border

This border defines the top, left, and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the column.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the column; placed 0.1" below last content in column.

2 Retention title

This header defines each retention question; it begins directly below the top border.

Fill: 15% black, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

8 Retention instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

4 Retention content

Presents the question clearly to the voter; it begins no less than 0.1" below bottom of instructions fill.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of column.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of column.

Space between languages should be 0.1".

Retention selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

6 Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of column area allowed for selection options.

Discussion

The decision to apply color only to instructions was confirmed by feedback from usability testing and literacy experts.

All names in any given retention question should be given the same amount of vertical space. If one candidate's name must break onto a second line, the vertical space for all candidates should be changed to match.

Two languages

D

0

3

4

Ballot Measure 101: Open Primaries

Propuesta 101: Elecciones primarias abiertas

Vote yes or no Vote sí o no

Requires primary elections where voters may vote for any state or federal candidate regardless of party registration of voter or candidate. The two primary-election candidates receiving most votes for an office, whether they are candidates with no party or members of same or different party, would be listed on general election ballot. Exempts presidential nominations. Fiscal Impact: No significant net fiscal effect on state and local governments. Requiere de elecciones primarias en las que los electores pueden votar por cualquier candidato estatal o federal sin importar el partido en el que el elector o el candidato esté inscrito. Los candidatos de las elecciones primarias que reciban más votos para un cargo, sin importar si son candidatos sin partido o miembros de un mismo o de diferente partido, serán listados en la papeleta de la elección general. Excluye las nominaciones presidenciales. Impacto fiscal: no hay un efecto fiscal significativo en los gobiernos estatal y local.

5 6

⊃ **Yes**/Sí

> **No**/No

Two languages

D

Ballot measure specifications

Ballot measure question components include borders that separate each question, titles, instructions, the question, and the choices. Ballot measure should span either two or three columns, depending on available ballot space. This variable column width is noted below as the "ballot measure area."

🚺 Border

This border defines the top, left, and bottom sides of the question.

Top: 3.0 pt. line, 100% black, extends full width of the ballot measure area.

Left: 1.0 pt. line, 100% black.

Bottom: 1.0 pt. line, 100% black, extends full width of the ballot measure area; placed 0.1" below last content in ballot measure area.

🕗 Ballot measure title

This header defines each ballot measure question; it begins directly below the top border.

Fill: 15% black, extends full width of the ballot measure area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Do not add additional space between languages. Type is centered between top and bottom of fill.

3 Ballot measure instructions

This area defines each question's instructions; it begins directly below the header.

Fill: 10% process cyan, extends full width of the ballot measure area, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of fill.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

4 Ballot measure content

Presents the ballot measure question clearly to the voter; it begins no less than 0.1" below bottom of instructions fill, set 0.1" from left border. Ballot measure area should be divided into two equal columns separated by 0.5" with one language placed in each.

Type, Language One: Univers 65 Bold, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of column.

Type, Language Two: Univers 45 Light, size 12 pt., leading 15 pt., tracking -20, 100% black, left aligned.

Ballot measure selection options

First selection option should begin 0.2" below lowest baseline of content; on ballots with set selection locations, the distance may need to be greater. Subsequent options should begin 0.1" below final line of previous option. Options should be set as close as possible to the selection location, ideally in the leftmost column of the ballot measure area.

Option type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of ballot measure area.

Option type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, left aligned, set 0.1" from left edge of ballot measure area.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

6 Separation line

Each selection option should be followed by a line to clearly define it, even if it is the final option in a particular question. Line should be placed 0.1" below lowest baseline of selection option; on ballots with set selection locations, the distance may need to be greater. Line should also be located 0.1" above topmost ascender of the following option, if applicable.

Line: 0.25 pt. line, 100% black, extends full width of ballot measure area allowed for selection options.

Discussion

See page 3.21.

Samples: two languages

Optical scan ballot design best practices are applied to two-language variations on pages 3.51–3.57. The variations include a one-color version and an Asian-language version.

Specifications that vary from those outlined previously are included. The samples illustrate the flexibility of the design best practices.

The sample Chinese text in this section has been professionally translated, but translations do not reflect a specific elections expertise. The translated Spanish text has been edited to support election terminology recommended in the EAC's "Glossary of Key Election Terminology, English-Spanish, 2007."

Electronic files

The electronic files that were used to create these best practices are available at www.eac.gov.

They are provided in two formats: Acrobat (.pdf) and InDesign (.indd).*

Each item has a unique identification number and file name. For example, the Acrobat file of the illustration on the next page is "OpScan_2L_VersionA.pdf."

How to work with the samples and electronic files

The Acrobat files can be printed on an office printer (depending on paper size), or by a local vendor with digital printing capabilities (printing firms and copy shops often have digital printing capabilities). Printed versions of these samples will serve as an important reference during the ballot design and production process.

InDesign files are template files that can be edited. The illustrative diagrams used in the InDesign files are also available at www.eac.gov. These files end with ".eps" and can also be edited. Access to Adobe InDesign page layout software and to software that can edit .eps files (e.g., Adobe Illustrator) is necessary. Working with a designer who has access to—and expertise in—these software programs is recommended.

Alternatively, these items can be recreated in other page layout programs using the production specifications provided on pages 3.6–3.21; the Acrobat .pdf files as a visual guide; and, if appropriate, the illustration files provided. Using nonlayout programs, such as those commonly used to write text-only documents, is not appropriate or recommended.

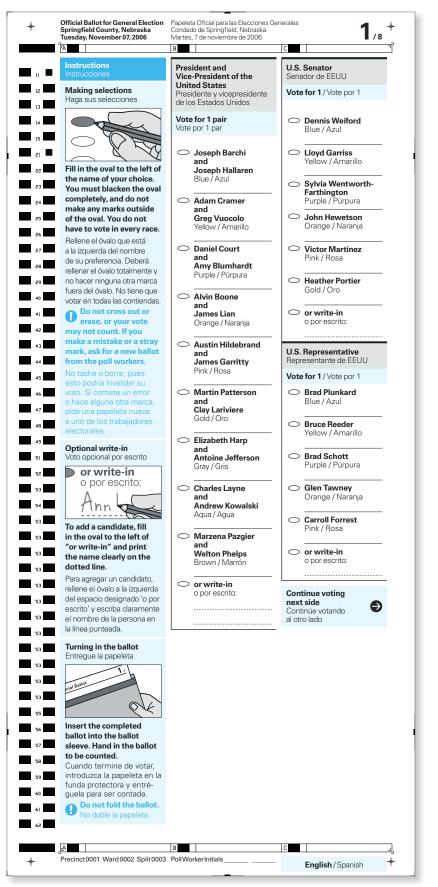
^{*}The EAC does not endorse any specific product or vendor. The best practices illustrated throughout this document do not rely on specific software, products, or vendors. For copyright reasons, the EAC cannot supply election officials with the fonts used in the InDesign files. They are available from numerous suppliers.

3.51 Optical scan ballots

Samples

Two languages

Version A



File name

OpScan_2L_VersionA

See pages 3.36–3.49 for detailed production specifications.

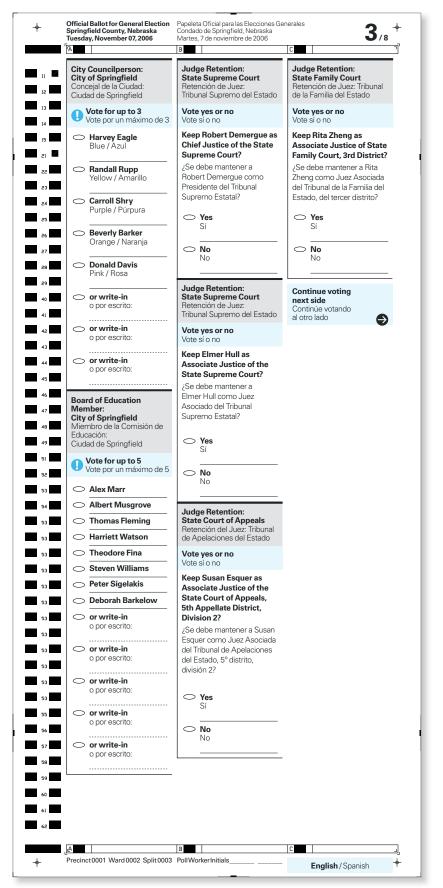
50% actual size

3.52 Optical scan ballots

Samples

Two languages

Version A



File name

OpScan_2L_VersionA

See pages 3.36–3.49 for detailed production specifications.

3.53 Optical scan ballots

Samples

Two languages



File name

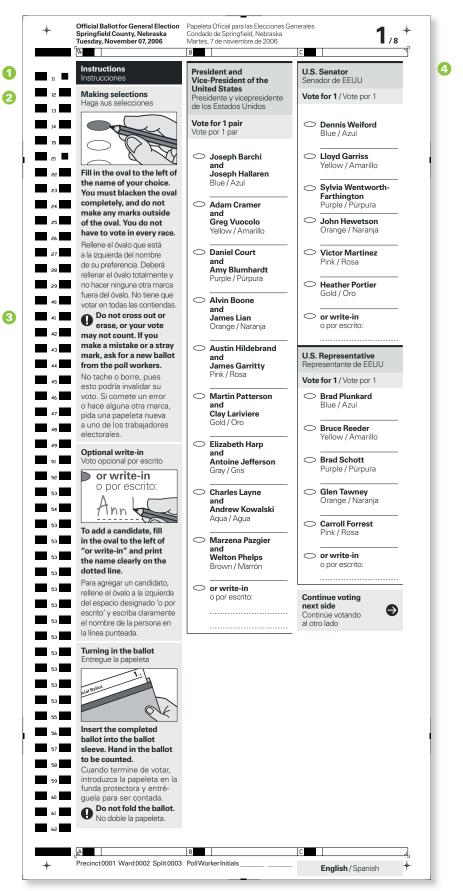
OpScan_2L_VersionA

See pages 3.36–3.49 for detailed production specifications.

3.54 Optical scan ballots

Samples

Two languages



File name

OpScan_2L_1Color

See pages 3.36–3.49 for detailed production specifications.

One-color version specifications

If circumstances dictate that ballots be printed in only one color, certain adjustments should be made to the specifications of the ballot.

Instruction head

Rather than process cyan, this header should be 100% black.

2 Instructional fills

Rather than screened process cyan, all instructional fills should be 10% black. This includes the fills used with all ballot instructions, question instructions, and all navigational instructions.

8 Attention icons

Rather than process cyan, all Attention icons should be 100% black. This includes icons for critical ballot instructions, as well as special question instructions.

Question titles

To create appropriate contrast with question instructions, question header fills should be 20% black, rather than the 15% black used on two-color ballots. 3.56 Optical scan ballots

Samples

Two languages

- ф-	Official Ballot for General Election Springfield County, Nebraska Tuesday, November 07, 2006	普選正式投票 内布拉斯加州,斯普林菲尔德縣 2006年11月7日,星期二	1 _{/8} +
		В	
11	Instructions 説明	President and Vice-President of the	U.S. Senator 美國參議院參議員
12	Making selections	United States 美國總統和副總統	Vote for 1
13	選擇	Vote for 1 pair	投票選一位候選人
14		投票選兩位候選人	O Dennis Weiford
15			Blue / 藍色
21		◯ Joseph Barchi	C Lloyd Garriss
22	Fill in the oval to the left of	and / 和 Joseph Hallaren	Yellow / 黃色
23	the name of your choice. You must blacken the oval	Blue / 藍色	Sylvia Wentworth- Farthington
24	completely, and do not	○ Adam Cramer	Purple / 紫色
25	make any marks outside of the oval. You do not	and / 和 Greg Vuocolo	O John Hewetson
26	have to vote in every race. 走掉某你哪裡的好哪儿么完	Yellow / 黃色	Orange / 橙色
27	請填滿您選擇的候選人名字 左側的橢圓形。您必須將該	O Daniel Court	Victor Martinez
28	橢圓完全塗黑,不要在橢圓 的外邊做任何的標記。您不	and / 和 Amy Blumhardt	Pink / 粉紅色
29	必參加每一輪的投票。	Purple / 紫色	→ Heather Portier Gold / 金色
40	Do not cross out or erase, or your vote	〇 Alvin Boone and / 和	
41	may not count. If you make a mistake or a stray	James Lian	○ or write-in / 或補選:
42	mark, ask for a new ballot	Orange / 橙色	
43	from the poll workers. 請不要塗改、擦抹,不然您	 Austin Hildebrand and / 和 	U.S. Representative
44	的投票會被視爲無效。如果	James Garritty Pink/粉紅色	美國衆議院衆議員
45	發生填寫錯誤或是在塗寫時 位置發生偏離,請向登記處		Vote for 1 投票選一位候選人
46	的工作人員索要一張新的選 票。	○ Martin Patterson and / 和	
47	Optional write-in	Clay Lariviere Gold / 金色	○ Brad Plunkard Blue / 藍色
48	任意的補選		
49	D or write-in / 或	○ Elizabeth Harp and / 和	○ Bruce Reeder Yellow / 黃色
51	A. I	Antoine Jefferson Gray / 灰色	◯ Brad Schott
52	7 Inn	○ Charles Layne	Purple / 紫色
53	To add a candidate, fill	and / 和	Glen Tawney
54	in the oval to the left of "or write-in" and print	Andrew Kowalski Aqua / 淺綠色	Orange / 橙色
53	the name clearly on the	O Marzena Pazgier	Carroll Forrest
53	dotted line. 增加一位候選人 [,] 請填	and / 和 Welton Phelps	Pink / 粉紅色
53	滿"或補選"左側的橢圓, 並在點狀下划綫上清晰地用	Brown / 棕色	◯ or write-in / 或補選:
53	印刷體填寫其姓名	│	
53	Turning in the ballot		
53	上繳選票		Continue voting next side
53	1		- 在下一面繼續投票
53	h		
53	ek -		
53	Insert the completed ballot into the ballot		
53	sleeve. Hand in the ballot		
55	to be counted. 請將整張選票完全放入選票		
56	信袋。上繳選票以供計算		
57	Do not fold the ballot. 請勿折疊選票		
58	Frank Full Frank Frank Frank Frank		
59			
60			
61			
62			
	<u>ب</u>	В	
-	Precinct0001 Ward0002 Split0003		

4

File name

OpScan_2L_Asian

See pages 3.36–3.49 for detailed production specifications.

Asian language version

Asian language versions

When dual-language ballots are produced for non-English languages, certain situations should be considered.

Typeface choices

Non-Western typefaces should be selected on the basis of simplicity, compatibility with the Univers type family, and cultural appropriateness. In the application shown, LeHei Pro is used for Chinese.

2 Instructional illustrations

Make sure that instructional illustrations accurately reflect the language being used on the specific ballot.

🕴 Candidate names

All ballot text should be translated, and candidate and political party names transliterated.

4 Language indication

Although it is assumed that all poll workers will speak English, not all will be able to identify the language on a non-English ballot. Non-English ballots should include this block to identify the language. The block should be placed near the bottom right-hand corner of the ballot, as far from ballot content as possible.

Fill: 10% process cyan, extends full width of one column, 0.1" above topmost ascender, and 0.1" below lowest baseline of type.

Type, Language One: Univers 65 Bold, size 12 pt., leading 13 pt., tracking -20, 100% black, center aligned.

Type, Language Two: Univers 45 Light, size 12 pt., leading 13 pt., tracking -20, 100% black, center aligned.

Use a forward slash to separate languages if both fit on a single line. If they are on separate lines, do not add additional space between languages. Type is centered between top and bottom of fill.

Discussion

Translators ensure proper grammatical, syntactic, and structural character of the content and appropriate use of local dialect variations. Obviously, accurate translations are vital for non-Englishspeaking voters. Online translations are often misleading, unclear, or simply wrong.

A cultural expert can review translated material to ensure that the translations are accurate and culturally relevant, and that their visual presentation is appropriate.

Depending on State or local legislation, transliteration of candidate names into the appropriate Asian characters may or may not be required. When transliterating names, consultation with a language expert is recommended. Care should be taken to use the most standard characters, and make sure that overall there are neither overtly positive nor overtly negative meanings in the sound-based characters.

The sample shown on page 3.56 does not have candidate names transliterated into Chinese. The sample below shows the recommended structure of a contest on a two-language ballot containing both English and transliterated Asian candidate names.

