

Effective Designs for the
Administration of Federal Elections

Section 6: Research report: Nebraska pilot test

June 2007

Nebraska pilot test overview

Preparing for an election can be a challenging, complicated process for election officials. Production cycles are organized around state-mandated deadlines that often leave narrow windows for successful content development, certification, translations, and election design activities. By keeping election schedules tightly controlled and making uniform voting technology decisions for local jurisdictions, States aspire to error-free elections. Unfortunately, current practices rarely include time or consideration for user-centered design development to address the basic usability needs of voters.

As a part of this research effort, a pilot study was conducted using professionally designed voter information materials and optical scan ballots in two Nebraska counties on Election Day, November 7, 2006. A research contractor partnered with Nebraska's Secretary of State's Office and their vendor, Elections Systems and Software (ES&S), to prepare redesigned materials for Colfax County and Cedar County (Lancaster County, originally included, opted out of participation). The goal was to gauge overall design success with voters and collaborate with experienced professionals within an actual production cycle with all its variables, time lines, and participants.

This case study reports the results of voter feedback on election materials, observations, and interviews from Election Day, and insights from a three-way attempt to utilize best practice design conventions. Data gathered in this study informs the final optical scan ballot and voter information specifications in sections 2 and 3 of the best practices documentation.

Pilot study goals

Pilot test goals were identified within the following three categories:

Gain empirical knowledge of an elections production process

- Understand production relationships between Nebraska officials and ES&S.
- Understand legislated requirements and time lines in Nebraska affecting election design.
- Understand how to successfully implement the professionally designed optical scan ballot and voter information guidelines.
- Review historic election materials and processes.

Study the effectiveness of implemented guidelines on Election Day

- Observe the success of designed materials in multiple polling environments.
- Discuss materials with poll workers, voters, and officials for qualitative feedback.

Analyze results and feedback

- Compare current and historic election results to gauge design influence on voting success.
- Compare final Colfax County and Cedar County ballots.
- Compare final ballot designs against proposed design conventions.
- Analyze success of voter information materials.
- Analyze observation data.

Event goals

All research events (listed in section 7), including this case study, support activities guided by these core objectives:

Clarify election official, poll worker, and voter requirements in the following areas:

- *Usable:* Tasks can be accomplished efficiently, accurately, and easily.
- *Accessible:* Materials are usable by people with disabilities.
- *Language:* English and non-English reading options are clear and understandable.
- *Legible:* Typewritten characters and paragraphs are easily read.
- *Readable:* Ideas presented are clear and easily understood.
- *Learnable:* Tools, skills, and new concepts are easily mastered.
- *Credible:* The voting process is authentic, capable, and trustworthy.

Clarify legislative requirements at State and county levels.

Clarify nonlegislative requirements.

Clarify production requirements:

- *Scalable:* Adjustments in content quantities are easily handled.
- *Flexible:* Adjustments to changing conditions are easily handled.
- *Reusable:* Re-creations are easy and effective.

Clarify existing election official and vendor practices.

Methodology

To achieve pilot test goals, the following qualitative research methods were used:

- Observations of Election Day materials and activities, from preproduction to the close of polls.
- Field interviews with poll workers, voters, and election officials.
- Reviews of historic election materials from Colfax County and Cedar County.

Production timeline

The table below provides an overview of research, design, and production activities in partnership with election officials and Nebraska’s ballot vendor, ES&S, leading up to the 2006 general election. All tasks supported State-regulated deadlines (shown in gray) as well as production requirements and deadlines communicated to officials by ES&S.

Date	Activity/deadline	Notes
August 1–31	Colfax and Cedar counties identified for pilot study participation by the secretary of state’s office.	Lancaster County was engaged early in the process but dropped out because a key staff member left at the beginning of the process. The county decided that a new ballot production process and new staff would pose too many variables to serve voters efficiently and with adequate assurance of success.
August 1–31	Ballot design work based on counties’ draft election content begins.	Counties provided draft ballot content for initial layout. County clerks showed a clear understanding that previous ballots had significant room for improvement, and enthusiastically accepted a wide range of ballot design changes.
August 1–31	Clerks in Cedar and Colfax counties approve final ballot designs, which are delivered to ES&S for initial production.	Ballot designs approved by county clerks were developed based on significant previous research and usability testing.
September 15	The secretary of state certifies ballot content.	
September 15–22	ES&S and county officials provide onsite and phone support to incorporate design best practices into final ballots.	Major hurdles included vendor’s proprietary ballot design software and file formats. Also, the software was not developed to accommodate major design changes, so many recommended best practices were difficult or impossible to implement.
September 16	Secretary of state provides Spanish translations for Colfax County ballots.	The official Nebraska election calendar did not include requirements for translations necessary in Colfax county (currently the only county in the state required to offer a second language on the ballot).
September 22	Registered absentee voters are sent ballots for early voting.	
October 1	ES&S completes ballot production.	Final ballots varied significantly from design best practices—including recommended fonts, leading, spacing between vote mark and candidate name, shaded fills to differentiate voting instructions, and referendum layout.
October 16–20	Field visits to polling locations in both counties.	Election officials interviewed, ballot preparations observed, poll locations analyzed for voter information strategy.

October 1–31	Voter information materials in English and Spanish designed.	Nebraska's secretary of state provides voter information materials previously used and approved by legislation. Materials were reviewed and edited by simple language experts before initial layout began.
October 15–31	Simple language experts review draft voter information materials.	
October 2	State deadline to publish/post notice of elections.	
October 22–November 4	State publishes sample ballots in newspapers.	
October 27	State deadline for posting sample ballots in county offices.	
November 1	State deadline to mail early ballots.	
November 3	State deadline to distribute sample ballots to county, city, or village.	
November 5	Voter information materials produced.	Materials printed on vinyl from e-mailed digital files.
November 6	Participation in poll worker training in Colfax County and distribute voter information materials in Cedar and Colfax counties.	Walk-through of all voter information materials with county poll workers prior to Election Day.
November 7	Election Day.	Cedar County printed their own ballots on a laser printer with ES&S-supplied paper and ES&S shipped printed ballots to Colfax County.

Findings

Production process relationships

- Local officials had modest control over service, costs, and quality in their State-sponsored vendor contracts.
- Counties competed with one another for vendor resources to accomplish identical goals under identical state election deadlines. During the ballot design and production phase, pilot test personnel temporarily shared this management responsibility with officials so that the proposed best practices could be implemented to their fullest extent.
- The Nebraska secretary of state's office had strong working relationships with pilot test personnel, ES&S, and the Cedar and Colfax county clerks. As an executive sponsor, the deputy of elections raised the visibility and credibility of the project and facilitated decision making. Pilot test personnel offered weekly, and sometimes daily, guidance and feedback to ES&S on local ballot layout, as well as suggestions for quality services (e.g., translations) that would advance the ballot design used in the general election.

Legislative requirements

- Nebraska's legislative time line allows only 2 weeks for ballot design and production between content certification and absentee voting deadlines for all ballot variations (splits) in each jurisdiction.
- Nebraska law mandates the use of italicized text in referendums, which undermines ballot legibility as well as the core typographic value of italics (which should be used on a limited basis for emphasis).
- Language used to describe statewide issues in the ballots is simplified from the "official" descriptions offered in newspapers and on record, but it still poses a challenge for many voters.

Implementing best practices

- ES&S and officials were enthusiastic about incorporating best practices but did not prioritize their execution.
- Colfax County's bilingual ballot layout deviated from recommended best practices, which called for a vertical layout with English in one column and Spanish side-by-side in the next column. Instead, the Colfax County ballot displayed an English paragraph followed by the translated Spanish paragraph, which made it difficult to read in either language.
- Cedar County's ballot colors did not conform to design best practices when produced on an ES&S laser printer.

Ballot comparison

- For a complete comparison among the previous, proposed, and implemented ballots in Cedar and Colfax counties, see pages 6.8–6.14.

Election day observations

- Voters did not notice a significant difference between pilot study ballots and those used in the past in their jurisdictions.
- Voters had few problems with ballots, and the chief complaint was ballot measure language.
- Poll workers in Colfax County supported a new, coherent voter information system.
- On Election Day, placement of voter information posters was limited to available wall space in polling places. This often reduced voters' ability to see and use the information.
- Few voters noticed the voter information materials, and few poll workers directed voters to them. Poll workers generally answered voters' questions themselves.
- When voters were directed to the information materials, voters and poll workers agreed on their value.
- Some voters were reluctant to request help from poll workers. Some asked other (sometimes active) voters for assistance instead.
- For voter information materials to be effective, they must be placed where voters will see them and can read them.
- Poster formats alone do not meet the needs of all polling precincts. In-booth and tabletop versions of the materials may be necessary.

Cedar County Ballot, May 2006

Primary election ballot from May 9, 2006. Significant differences from the redesigned ballot (page 6.9) are numbered below and annotated on page 6.14.

Republican Official Ballot, Primary Election, May 9, 2006

	Cedar County	Nebraska Primary	PCT 01 (1)	
11	INSTRUCTIONS TO VOTERS: 1. TO VOTE YOU MUST COMPLETELY BLACKEN THE OVAL (●). 2. Use only the marking device provided. 3. For a WRITE-IN, write in the name on the line provided and blacken the oval completely. 4. DO NOT CROSS OUT OR ERASE. If you spoil your ballot, exchange the ballot for a new one. 5. AFTER VOTING, insert your ballot in the ballot sleeve. DO NOT FOLD THE BALLOT.	AUDITOR OF PUBLIC ACCOUNTS Vote For ONE <input type="radio"/> Mike Foley <input type="radio"/> _____	COUNTY TICKET COUNTY TREASURER Vote For ONE <input type="radio"/> _____	
21		ATTORNEY GENERAL Vote For ONE <input type="radio"/> Jon Bruning <input type="radio"/> _____	NONPARTISAN TICKET BOARD DIRECTORS NPPD SUBDISTRICT 11 Vote For ONE <input type="radio"/> Wayne E. Boyd <input type="radio"/> David P. Dowling <input type="radio"/> Cleve Stolpe	
40		SENATORIAL TICKET UNITED STATES SENATOR Vote For ONE <input type="radio"/> David J. Kramer <input type="radio"/> Don Stenberg <input type="radio"/> Pete Ricketts <input type="radio"/> _____	STATE TREASURER Vote For ONE <input type="radio"/> Shane Osborn <input type="radio"/> Ron Ross <input type="radio"/> _____	LEGISLATIVE DISTRICT 40 Vote For ONE <input type="radio"/> Cap Dierks <input type="radio"/> Duane L. Dean <input type="radio"/> Tom Noecker <input type="radio"/> _____
41		CONGRESSIONAL TICKET REPRESENTATIVE IN CONGRESS District Three Vote For ONE <input type="radio"/> Douglas Polk <input type="radio"/> John Hanson <input type="radio"/> Adrian Smith <input type="radio"/> Jay Vavricek <input type="radio"/> David Harris <input type="radio"/> _____	COUNTY TICKET COUNTY ASSESSOR Vote For ONE <input type="radio"/> _____	BOARD OF REGENTS DISTRICT 3 Vote For ONE <input type="radio"/> Chuck Hasselbrook <input type="radio"/> _____
51		STATE TICKET GOVERNOR Vote For ONE <input type="radio"/> Dave Nabity <input type="radio"/> Dave Heineman <input type="radio"/> Tom Osborne <input type="radio"/> _____	COUNTY ATTORNEY Vote For ONE <input type="radio"/> George L. Hirschbach <input type="radio"/> _____	VOTE BOTH SIDES
	SECRETARY OF STATE Vote For ONE <input type="radio"/> John A. Gale <input type="radio"/> _____	COUNTY CLERK Vote For ONE <input type="radio"/> _____		
		CLERK OF THE DISTRICT COURT Vote For ONE <input type="radio"/> Janet Wiechelmann <input type="radio"/> _____		
		COUNTY SHERIFF Vote For ONE <input type="radio"/> Larry D. Koranda <input type="radio"/> _____		
		COUNTY COMMISSIONER DIST. 1 Vote For ONE <input type="radio"/> Frederick Pinkelman <input type="radio"/> _____		

Initials _____

7.4.1.0a / 012503-14 © Election Systems & Software, Inc. 1981, 2002

Cedar County recommended best practices, November 2006

Proposed general election ballot displaying the recommended design best practices. This ballot uses sample content originally developed by the National Institute of Standards and Technology (NIST). This design was approved by the county clerk before production by the ballot vendor. Significant differences from the May 2006 ballot (page 6.8) are numbered below and annotated on page 6.14.

1
2

Official Ballot for General Election
Springfield County, Nebraska – Tuesday, November 07, 2006

1 of 4

	A	B	C
11	<p>3</p> <p>i Voting Instructions</p> <p>Fill in the oval to the left of the name of your choice. Vote for one candidate in each contest unless otherwise indicated.</p>  <p>You must blacken the oval completely. Use only the marker found in the voting booth.</p> <p>You may write in a candidate by placing that name on the blank line and filling in the oval to the left.</p> <p>write-in:</p>  <p>After voting, insert your ballot in the ballot sleeve. Do not fold the ballot.</p> <p>! Do not cross out or erase. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.</p> <p>Start Voting Here</p> <p>Straight Party Vote</p> <p>If you cast a straight party vote, you are casting a vote for all candidates of that party in the partisan contests on this ballot.</p> <p>However, if you also cast a vote in a specific partisan contest, that vote takes precedence over your straight party vote.</p> <p>vote for one</p> <p><input type="radio"/> Blue</p> <p><input type="radio"/> Yellow</p> <p><input type="radio"/> Purple</p> <p><input type="radio"/> Orange</p> <p><input type="radio"/> Pink</p> <p><input type="radio"/> Gold</p> <p><input type="radio"/> Gray</p> <p><input type="radio"/> Aqua</p> <p><input type="radio"/> Brown</p>	<p>President and Vice-President of the United States</p> <p>Four-Year Term</p> <p>vote for one</p> <p><input type="radio"/> Joseph Barchi and Joseph Hallaren Blue</p> <p><input type="radio"/> Adam Cramer and Greg Vuocolo Yellow</p> <p><input type="radio"/> Daniel Court and Amy Blumhardt Purple</p> <p><input type="radio"/> Alvin Boone and James Lian Orange</p> <p><input type="radio"/> Austin Hildebrand-McDougall and James Garrity Pink</p> <p><input type="radio"/> Martin Patterson and Clay Lariviere Gold</p> <p><input type="radio"/> Elizabeth Harp and Antoine Jefferson Gray</p> <p><input type="radio"/> Charles Layne and Andrew Kowalski Aqua</p> <p><input type="radio"/> Marzena Pazgier and Welton Phelps Brown</p> <p><input type="radio"/> write-in: _____</p> <p>U.S. Senator</p> <p>Six-Year Term</p> <p>vote for one</p> <p><input type="radio"/> Dennis Weiford Blue</p> <p><input type="radio"/> Lloyd Garriss Yellow</p> <p><input type="radio"/> Sylvia Wentworth-Farhinton Purple</p> <p><input type="radio"/> John Hewetson Orange</p> <p><input type="radio"/> Victor Martinez Pink</p> <p><input type="radio"/> Heather Portier Gold</p> <p><input type="radio"/> David Platt Gray</p> <p><input type="radio"/> write-in: _____</p>	<p>U.S. Representative</p> <p>Two-Year Term</p> <p>vote for one</p> <p><input type="radio"/> Brad Plunkard Blue</p> <p><input type="radio"/> Bruce Reeder Yellow</p> <p><input type="radio"/> Brad Schott Purple</p> <p><input type="radio"/> Glen Tawney Orange</p> <p><input type="radio"/> Carroll Forrest Pink</p> <p><input type="radio"/> write-in: _____</p> <p>State Governor and Lieutenant-Governor</p> <p>Four-Year Term</p> <p>vote for one</p> <p><input type="radio"/> Charlene Franz and Chris Norberg Blue</p> <p><input type="radio"/> Gerard Harris and Anthony Parks Yellow</p> <p><input type="radio"/> Linda Bargmann and Luis Garcia Purple</p> <p><input type="radio"/> Barbara Adcock and Charles Qualey Orange</p> <p><input type="radio"/> Carrie Steel-Loy and George Hovis Pink</p> <p><input type="radio"/> Frederick Sharp and Burt Zirkle Gray</p> <p><input type="radio"/> write-in: _____</p> <p>State Attorney General</p> <p>Four-Year Term</p> <p>vote for one</p> <p><input type="radio"/> Christian Poole Blue</p> <p><input type="radio"/> Benjamin Isaacs Yellow</p> <p><input type="radio"/> Annette Royster Purple</p> <p><input type="radio"/> write-in: _____</p>
12			
13			
14			
15			
21			
22			
23			
24			
25			
26			
27			
28			
29			
40			
41			
42			
43			
44			
45			
46			
47			
48			
49			
51			
52			
53			
54			
55			
56			
57			
58			
59			
60			
61			
62			
9	<p>Continue Voting Next Side →</p>		

011002

Cedar County Ballot, November 2006

General election ballot based on partial application of new design standards. Significant differences from the proposed ballot design (page 6.9) are numbered below and annotated on page 6.14.

1
2

Official Ballot for General Election
Cedar County, Nebraska - Tuesday, November 07, 2006
1 of 4

A Cedar County	B State of Nebraska	C PCT 01 (1)
----------------	---------------------	--------------

Voting Instructions

Fill in the oval to the left of the name of your choice. Vote for one candidate in each contest unless otherwise indicated.



You must blacken the oval completely. Use only the marker found in the voting booth.

You may write in a candidate by placing that name on the blank line and filling in the oval to the left.

write-in / escriba

Ann

After voting, insert your ballot in the ballot sleeve. Do not fold the ballot.

Do not cross out or erase. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.

Start Voting Here

<p>For Governor Vote for ONE</p> <p><input type="radio"/> Dave Heineman Governor Republican</p> <p><input type="radio"/> Rick Sheehy Lt. Governor</p> <hr/> <p><input type="radio"/> David Hahn Governor Democrat</p> <p><input type="radio"/> Steve Loschen Lt. Governor</p> <hr/> <p><input type="radio"/> Barry Richards Governor Nebraska</p> <p><input type="radio"/> Terry Richards Lt. Governor</p> <hr/> <p><input type="radio"/> Mort Sullivan Governor By Petition</p> <p><input type="radio"/> Ron Kellogg Lt. Governor</p> <hr/> <p><input type="radio"/> write-in Governor</p> <hr/> <p><input type="radio"/> write-in Lt. Governor</p>	<p>For Auditor of Public Accounts Vote for ONE</p> <p><input type="radio"/> Mike Foley Republican</p> <p><input type="radio"/> Kate Witek Democrat</p> <p><input type="radio"/> Kelly Renee Rosberg Nebraska</p> <p><input type="radio"/> Steve Larrick Green</p> <p><input type="radio"/> write-in</p> <hr/> <p>For Attorney General Vote for ONE</p> <p><input type="radio"/> Jon Bruning Republican</p> <p><input type="radio"/> write-in</p> <hr/> <p>For County Assessor Vote for ONE</p> <p><input type="radio"/> Don J. Hoelsing Democrat</p> <p><input type="radio"/> write-in</p> <hr/> <p>For Secretary of State Vote for ONE</p> <p><input type="radio"/> John A. Gale Republican</p> <p><input type="radio"/> Jay C. Stoddard Democrat</p> <p><input type="radio"/> Doug Paterson Green</p> <p><input type="radio"/> write-in</p> <hr/> <p>For State Treasurer Vote for ONE</p> <p><input type="radio"/> Shane Osborn Republican</p> <p><input type="radio"/> John H. Gathings Nebraska</p> <p><input type="radio"/> write-in</p>
<p>For United States Senator Vote for ONE</p> <p><input type="radio"/> Pete Ricketts Republican</p> <p><input type="radio"/> Ben Nelson Democrat</p> <p><input type="radio"/> write-in</p> <hr/> <p>For Representative in Congress District THREE Vote for ONE</p> <p><input type="radio"/> Adrian Smith Republican</p> <p><input type="radio"/> Scott Kleeb Democrat</p> <p><input type="radio"/> write-in</p>	<p>For County Attorney Vote for ONE</p> <p><input type="radio"/> George L. Hirschbach Republican</p> <p><input type="radio"/> write-in</p> <hr/> <p>For County Clerk Vote for ONE</p> <p><input type="radio"/> David Dowling Democrat</p> <p><input type="radio"/> write-in</p> <hr/> <p>For Clerk of the District Court Vote for ONE</p> <p><input type="radio"/> Janet R. Wiechelma Republican</p> <p><input type="radio"/> Lila Driver Democrat</p> <p><input type="radio"/> write-in</p>

Continue Voting Next Side

Typ:01 Seq:0001 Spl:01
01 01

7.4.2.0 / 012503-14 © Election Systems & Software, Inc. 1981, 2002

3

4

5

6

7

8

9

Colfax County Ballot, May 2006

Primary election ballot from May 9, 2006. Significant differences from the redesigned ballot (page 6.13) are numbered below and annotated on page 6.14.

Republican Official Ballot, Primary Election, May 9, 2006

	Colfax County	Nebraska Primary	Schuyler 1
3	INSTRUCTIONS TO VOTERS: 1. TO VOTE YOU MUST COMPLETELY BLACKEN THE OVAL (●). 2. Use only the marking device provided. 3. For a WRITE-IN, write in the name on the line provided and blacken the oval completely. 4. DO NOT CROSS OUT OR ERASE. If you spoil your ballot, exchange the ballot for a new one. 5. AFTER VOTING, insert your ballot in the ballot sleeve. DO NOT FOLD THE BALLOT		
		STATE TICKET	COUNTY TICKET
		FOR AUDITOR OF PUBLIC ACCOUNTS Para Auditor de Cuentas Publicas Vote for one/por uno <input type="radio"/> Mike Foley <input type="radio"/> _____	FOR COUNTY SHERIFF Para Funcionario jefe de ley del condado VOTE FOR ONE <input type="radio"/> Pat Eller <input type="radio"/> _____
		FOR ATTORNEY GENERAL Para Procurador General Vote for one/por uno <input type="radio"/> Jon Bruning <input type="radio"/> _____	FOR COUNTY ATTORNEY Para Abogado del Condado Vote for one/por uno <input type="radio"/> Robert Westadt <input type="radio"/> _____
4	SENATORIAL TICKET		
5	FOR UNITED STATES SENATOR Candidatura del Senado Vote for One/por uno <input type="radio"/> David J. Kramer <input type="radio"/> Don Stenberg <input type="radio"/> Pete Ricketts <input type="radio"/> _____		
6		FOR STATE TREASURER Para Tesorero del Estado Vote for one/por uno <input type="radio"/> Shane Osborn <input type="radio"/> Ron Ross <input type="radio"/> _____	FOR COUNTY SURVEYOR Para Agrimensor del Condado Vote for One/por uno <input type="radio"/> Marvin L. Svoboda <input type="radio"/> _____
7			FOR COUNTY COMMISSIONER 3RD DISTRICT Comisionado de Condado Distrito Tres Vote for ONE/por uno <input type="radio"/> Jerry Heard <input type="radio"/> _____
8	CONGRESSIONAL TICKET	COUNTY TICKET	
	FOR REPRESENTATIVE IN CONGRESS DISTRICT ONE Candidatura del Congreso Vote for One/por uno <input type="radio"/> Jeff Fortenberry <input type="radio"/> _____	FOR COUNTY CLERK Para Secretaria del Condado Vote for one/por uno <input type="radio"/> _____	
	STATE TICKET	FOR CLERK OF THE DISTRICT COURT Para Escribano forense del tribunal del distrito Vote for one/por uno <input type="radio"/> _____	For Member of State Board of Regents District Three El Comité de Educacion del Estado Distrito Tres Vote for one/por uno <input type="radio"/> Chuck Hassebrook <input type="radio"/> _____
	FOR GOVERNOR Papeleta del Estado Vote for One/por uno <input type="radio"/> Dave Nabity <input type="radio"/> Dave Heineman <input type="radio"/> Tom Osborne <input type="radio"/> _____	COUNTY TREASURER Para Tesorero del Condado Vote for One/por uno <input type="radio"/> _____	
	FOR SECRETARY OF STATE Para Secretario del Estado Vote for one/por uno <input type="radio"/> John A. Gale <input type="radio"/> _____	FOR COUNTY ASSESSOR Para Asesor del Condado Vote for one/por uno <input type="radio"/> _____	
			VOTE BOTH SIDES
	Typ:01 Seq:0001 Spl:01	Republican Party	01 01
	7.4.2.0 / 012503-14 © Election Systems & Software, Inc. 1981, 2002		
	Initials _____		

Colfax County recommended best practices, November 2006

Proposed general election ballot with generic NIST content, displaying the recommended design best practices. This design was approved by the county clerk before production by the ballot vendor. Significant differences from the May 2006 ballot (page 6.11) are numbered below and annotated on page 6.14.

1
2

Official Ballot for General Election
Springfield County, Nebraska – Tuesday, November 07, 2006

1 of 4

La Votación Oficial Para la Elección General
El Condado de Springfield, Nebraska – Martes, 07 Noviembre, 2006

Voting Instructions
Instrucciones de Votación

Fill in the oval to the left of the name of your choice. Vote for one candidate in each contest unless otherwise indicated.

Complete el óvalo a la izquierda del nombre de su opción. Vote por un candidato en cada competencia a menos que se indicare contrariamente.



You must blacken the oval completely. Use only the marker found in the voting booth.

Usted debe ennegrecer el óvalo completamente. Utilice sólo el marcador encontrado en el puesto electoral.

You may write in a candidate by placing that name on the blank line and filling in the oval to the left.

Usted puede escribir en un candidato colocando que denomina en la línea en blanco y llenando el óvalo a la izquierda.

write-in:

Ann

After voting, insert your ballot in the ballot sleeve. Do not fold the ballot.

Después que votar, mete su votación en la manga de la votación. No doble la votación.

Do not cross out or erase. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.

No tache ni borre. Si usted comete un error o una marca perdida, pida una nueva votación de los trabajadores del sondeo.

Start Voting Here
Empiece a Votar Aquí

Straight Party Vote
Voto Recto de Partido

If you cast a straight party vote, you are casting a vote for all candidates of that party in the partisan contests on this ballot.

However, if you also cast a vote in a specific partisan contest, that vote takes precedence over your straight party vote.

Si usted lanza un voto recto del partido, usted vota para todos candidatos de ese partido en los concursos partidistas en esta votación.

Sin embargo, si usted vota también en un concurso partidista específico, que vota tiene prioridad sobre su voto recto del partido.

vote for one / vote para uno

- Blue
- Yellow
- Purple
- Orange
- Pink
- Gold
- Gray
- Aqua
- Brown

President and Vice-President of the United States
Presidente y Vicepresidente de los Estados Unidos

Four-Year Term / Término de Cuatro-años
vote for one / vote para uno

- Joseph Barchi and Joseph Hallaren Blue
- Adam Cramer and Greg Vuocolo Yellow
- Daniel Court and Amy Blumhardt Purple
- Alvin Boone and James Lian Orange
- Austin Hildebrand-McDougall and James Garrity Pink
- Martin Patterson and Clay Lariviere Gold
- Elizabeth Harp and Antoine Jefferson Gray
- Charles Layne and Andrew Kowalski Aqua
- Marzena Pazgier and Welton Phelps Brown
- write-in / escribe-en: _____

Continue Voting Next Side
Siga Votando Próximo Lado ➔

English / Spanish

011002

3
4
5
6
7
8
9

Colfax County Ballot, November 2006

General election ballot based on partial application of new design standards. Significant differences from the proposed ballot design (page 6.12) are numbered below and annotated on page 6.14.

1
2

Official Ballot for General Election
Colfax County, Nebraska - Tuesday, November 07, 2006

1 of 6

Colfax County State of Nebraska Schuyler 1

La Votación Oficial Para la Elección General
El Condado de Colfax, Nebraska - Martes, 07 Noviembre, 2006

<p>Voting Instructions Instrucciones Para Votar</p> <p>Fill in the oval to the left of the name of your choice. Vote for one candidate in each contest unless otherwise indicated.</p> <p>Reliene el óvalo a la izquierda del nombre de su selección. Vote por un candidato en cada contienda a menos que se le indique lo contrario.</p>  <p>You must blacken the oval completely. Use only the marker found in the voting booth.</p> <p>Deberá rellenar el óvalo completamente. Utilice solamente el marcador ubicado en la caseta de votación.</p> <p>You may write in a candidate by placing that name on the blank line and filling in the oval to the left.</p> <p>Para votar por un candidato que no aparece en la boleta, escriba el nombre de la persona en la línea designada y rellene el óvalo correspondiente.</p>  <p>After voting, insert your ballot in the ballot sleeve. Do not fold the ballot.</p> <p>Después de votar, coloque su boleta en la funda protectora. No doble la boleta.</p> <p>Do not cross out or erase. If you make a mistake or a stray mark, ask for a new ballot from the poll workers.</p> <p>No tache ni borre. Si comete un error o hace alguna otra marca por equivocación, pídale a uno de los oficiales electorales una boleta nueva.</p> <p>Start Voting Here Empiece a Votar Aquí</p>	<p>For Representative in Congress District 1 Candidatura del Congreso Distrito Uno Vote for ONE / por UNO</p> <p><input type="radio"/> Jeff Fortenberry Republican</p> <p><input type="radio"/> Maxine B. Moul Democrat</p> <p><input type="radio"/> write-in / escribe-en: </p>	<p>For State Treasurer Para Tesorero del Estado Vote for ONE / por UNO</p> <p><input type="radio"/> Shane Osborn Republican</p> <p><input type="radio"/> John H. Gathings Nebraska</p> <p><input type="radio"/> write-in / escribe-en: </p>
<p>For Governor Para Gobernador Vote for ONE / por UNO</p> <p><input type="radio"/> Dave Heineman Governor Republican</p> <p><input type="radio"/> Rick Sheehy Lieutenant Governor</p> <p><input type="radio"/> David Hahn Governor Democrat</p> <p><input type="radio"/> Steve Loschen Lieutenant Governor</p>	<p>For Auditor of Public Accounts Para Auditor de Cuentas Publicas Vote for ONE / por UNO</p> <p><input type="radio"/> Mike Foley Republican</p> <p><input type="radio"/> Kate Witek Democrat</p> <p><input type="radio"/> Kelly Renee Rosberg Nebraska</p> <p><input type="radio"/> Steve Larrick Green</p> <p><input type="radio"/> write-in / escribe-en: </p>	<p>For Attorney General Para Procurador General Vote for ONE / por UNO</p> <p><input type="radio"/> Jon Bruning Republican</p> <p><input type="radio"/> write-in / escribe-en: </p>
<p>For United States Senator Candidatura del Senado Vote for ONE / por UNO</p> <p><input type="radio"/> Pete Ricketts Republican</p> <p><input type="radio"/> Ben Nelson Democrat</p> <p><input type="radio"/> write-in / escribe-en: </p>	<p>For Secretary of State Para Secretario del Estado Vote for ONE / por UNO</p> <p><input type="radio"/> John A. Gale Republican</p> <p><input type="radio"/> Jay C. Stoddard Democrat</p> <p><input type="radio"/> Doug Paterson Green</p> <p><input type="radio"/> write-in / escribe-en: </p>	<p>For Clerk of the District Court Para Escribano forense del tribunal del distrito Vote for ONE / por UNO</p> <p><input type="radio"/> Dori L. Kroeger Democrat</p> <p><input type="radio"/> write-in / escribe-en: </p>

Continue Voting Next Side
 Continue Votando al Otro Lado

9

Typ:01 Seq:0001 Spl:01

01 01

7.4.2.0 / 012503-14 © Election Systems & Software, Inc. 1981, 2002

Ballot comparison

Various elements were redesigned for the Cedar and Colfax county ballots. The goal of the redesign was to improve clarity, legibility, and ease of use for the voter. Some of these elements were not fully implemented on the actual ballots used for the election.

1 Election information

Larger type is used for all information critical to the voter.

2 Page numbers

Page numbers are included to help the voter navigate multiple-page ballots.

3 Voting instructions

Voting instructions have been greatly expanded; the language has been simplified, and they include illustrations.

4 Divisions by “ticket”

Previous ballots included subheads that divided the ballot into various categories. These subheads were removed, as they were inconsistent and redundant, and took emphasis away from the information of primary importance to the voter: candidate name and contest title.

5 Question titles

On the new ballots, a gray fill helps voters scan questions more easily. This visual distinction clarifies where each new question begins.

6 Question instructions

Instructions for each question are set apart from the title of the question and separated from the voting options area.

7 Separation of candidates

Hairlines are used to clearly separate the candidate names and help voters make sure they are voting for their chosen option.

8 Write-in voting

The write-in area has been clarified through the use of a more intuitive dashed line and the explicit “or write-in:” identifier.

9 Ballot navigation

The new ballots use a clearer system of navigation to ensure that voters know where they are in the process and what remains to complete. Graphic symbols, such as arrows, provide visual emphasis and help low-literacy and low-vision voters.

State metrics/reporting

Statistics were derived from 2006 election summary reports provided by county clerks. Reports were electronically generated by ES&S counting equipment with a report title "Grand Totals Node 1 Format." The Cedar County report was dated November 7, 2006, at 22:40:27. The Colfax County report was dated November 8, 2006, at 06:22:36.

Results from ballot questions to assess the best practices' impact were analyzed. Undervoting and overvoting rates were calculated for each race by dividing registered voters by the total number of votes counted.

No strong pattern emerged to suggest that the order or placement of contests (whether on page 1 or page 2) made a significant difference to voters in deciding to vote in a race.

	Cedar County	Colfax County
Registered voters	6,415	5,430
Number voting	4,010	3,050

Race with most participation

	Cedar County	Colfax County
	3939 (U.S. Senator)	2955 (County Sheriff)

Undervote

	Cedar County	Colfax County
Average	22.91%	23.61%
High	64.40% (Board of Governors, District 2)	56.45% (Board of Governors, District 2)

Overvote

	Cedar County	Colfax County	Statewide
Average	.22%	.17%	
High	4.7% (Governor)	2.96% (Governor)	.55%

The governor/lieutenant governor overvote rate increased significantly in both counties—both in terms of previous elections in those counties and in comparison with other Nebraska counties. In Cedar County, the overvote rose from an average 0.22% to 4.7% for the governor/lieutenant governor race. A sampling of 43 other Nebraska counties showed a 0.55% average overvote rate in this race.

There is not enough information to determine what may have caused this anomaly. One possibility is that—unlike the prototype ballot designs using the NIST content—the governor's race was the only paired-ticket contest on the ballot. Further study is necessary to determine what led to the overvote increase to identify its cause and try to prevent similar results in the future.

Recommendations

The 2006 pilot study in Nebraska demonstrated that the proposed design system was largely acceptable to participating voters and election officials, and could be partially implemented with moderate effort on the part of the participating service provider, ES&S.

The study uncovered areas where adoption of the best practices will prove challenging, including legislative requirements, tight election calendars, limitations of ballot layout software, lack of experience with translation processes, lack of adequate financial resources to fund significant improvements at the county level, and limited availability of skilled resources during peak election production times. These issues led to the following recommendations:

1. Conduct more observations and interviews.

Future activity in this area should include conducting additional field interviews with election officials from all levels of government, in all parts of the country, and in all roles in the ballot development process. A corollary recommendation is to continue dialog with manufacturers and service vendors.

2. Explore voting experience options related to ballot design with industrial design experts and manufacturers.

Graphic designers and usability experts can enhance the overall voting experience, but the critical relationship between the voter and the voting equipment should also be analyzed, particularly when addressing the needs of voters with disabilities (including mobility or vision).

3. Extend optical scan ballot pilot tests to other locations.

Research should include pilot tests in additional locations that will continue to challenge and refine the proposed design systems. Selected locations should offer diversity in terms of geography, demographics, voting equipment, and legislative requirements.

4. Initiate direct-recording electronic (DRE) ballot pilot studies.

Future studies should include pilot tests with DRE voting equipment. The development of interactive prototypes for pilot-testing in a real election would be complex and would require considerable commitment, but the benefit to voters would outweigh the investment. Pilot test locations should offer diversity in terms of geography, demographics, voting equipment, and legislative requirements.

5. Collect most recent general election ballot samples and voting statistics.

NIST's small collection of ballots from 2004 elections was useful in developing the ballot design best practices. Establish a process to collect and make public a library of currently used ballots and correlated voting statistics.

6. Analyze under- and overvoting by race/issue for the 2006 general election.

Research should be conducted to understand the impact of design on individual race results by correlating rates of under- and overvoting to ballot design choices. While this would not be a fully scientific study, the information would provide insight into the problems voters may have experienced without infringing on their privacy.

7. Establish a national voter survey to measure ballot usability.

Measure voter satisfaction with ballots using interviews and surveys, and analyze the results. The sample should include:

- Ten locations for each optical scan model, reflecting a geographically and demographically diverse population (model + geographical/demographic diversity x 10).
- Ten locations for each DRE model, reflecting a geographically and demographically diverse population.

8. Explore improvements to state and local legislation.

Many State and local laws mandate specific design decisions. Study the extent to which Federal, State, and local laws regarding ballot design vary and how these laws may inhibit the creation of an effective national ballot design system.

9. Establish a national ballot design system.

Encourage a single, simple, and consistent national ballot design system, such as the system used for tax forms. This system should give voters control over candidate ordering on DRE ballots and provide a nationwide system for rotating candidate names on printed ballots. The system should include best practices for the use of simple language on ballot issues (referenda, measures, etc.).

Conclusion

The challenges for achieving a successful and satisfying voting experience extend well beyond ballot design. Ongoing study is necessary to identify existing and proposed legislative requirements that affect ballot design and the voting experience. Unified national ballot design best practices will form a baseline from which to measure national success in terms of the voter's experience; help election officials work more efficiently; and allow manufacturers to focus on other issues of importance.