AGENDA TECHNICAL PANEL

Varner Hall - Board Room 3835 Holdrege Street Lincoln, Nebraska Tuesday, June 11, 2019 9:00 a.m.

- 9:00 a.m. 1. Roll call; meeting notice; Open Meetings Act information.
 - 2. Public comment.
 - 3. April 9, 2019 meeting minutes. [Motion to approve.]* (Attachment 3)
- 9:05 a.m. 4. Projects.
 - a. Enterprise project status dashboard. Andy Weekly. (Attachment 4-a)
 - b. Nebraska State Accountability (NeSA) project, Dept. of Education. [Motion to recommend closure.]*
 - c. Nebraska Regional Interoperability Network (NRIN) project, Nebraska Council of Regions. [Motion to recommend closure.]*
- 9:30 a.m. 5. Technical standards and guidelines.
 - a. Proposal 19-01, amend street centerline standards. [Motion to recommend approval.]* (Attachment 5-a)
 - b. **Proposal 19-02, amend address point standards.** [Motion to recommend approval.]* (Attachment 5-b)
 - c. Proposal 19-03, amend accessibility policy. [Motion to post for 30-day comment period.]* (Attachment 5-c)
- 9:55 a.m. 6. Work group updates; other business.
- 10:00 a.m. 7. Adjourn.

* Indicates an action item.

The Technical Panel will attempt to adhere to the sequence of the published agenda, but reserves the right to adjust the order and timing of items and may elect to take action on any of the items listed.

Meeting notice was posted to the <u>NITC website</u> and the <u>Nebraska Public Meeting Calendar</u> on April 17, 2019. The agenda was posted to the NITC website on June 7, 2019.

Nebraska Open Meetings Act | Technical Panel Meeting Documents

Attachment 3

TECHNICAL PANEL

Varner Hall - Board Room 3835 Holdrege Street Lincoln, Nebraska Tuesday, April 9, 2019, 9 a.m. MINUTES

MEMBERS PRESENT:

Kirk Langer, Chair, Lincoln Public Schools Mark Askren, University of Nebraska Ed Toner, Chief Information Officer, State of Nebraska Jeremy Sydik, University of Nebraska

MEMBERS ABSENT: Ling Ling Sun, Nebraska Education Telecommunications

ROLL CALL; MEETING NOTICE; OPEN MEETINGS ACT INFORMATION

Mr. Langer called the meeting to order at 9:05 a.m. Roll call was taken. A quorum was present. The meeting notice was posted to the NITC website and the Nebraska Public Meeting Calendar on February 15, 2019. The agenda was posted to the NITC website on April 4, 2019. A copy of the Nebraska Open Meetings Act was posted on the wall of the meeting room.

APPROVAL OF THE FEBRUARY 12, 2019 MEETING MINUTES

Mr. Askren moved to approve the February 12, 2019 minutes as presented. Roll call vote: Langer-Yes, Askren-Yes, and Sydik-Yes. Results: Yes-3, No-0, Abstained-0. Motion carried.

ENTERPRISE PROJECTS AND PROJECT DASHBOARD

Andy Weekly, Office of the CIO

Mr. Weekly provided a report on the projects. Mr. Weekly noted that the Novell to Netscaler project was closed. Questions from the panel were entertained.

Members discussed recommending closure of the following projects: Nebraska State Accountability (NeSA) and Nebraska Regional Interoperability Network (NRIN). Mr. Weekly will request closure reports from these projects for the June meeting.

TECHNICAL STANDARDS AND GUIDELINES; POST FOR 30-DAY COMMENT PERIOD

John Watermolen, GIS Coordinator, reported that the GIS Council has approved these standards.

Proposal 19-01, amend street centerline standards.

Mr. Toner moved to post Proposal 19-01 for the 30-day comments period. Roll call vote: Sydik-Yes, Toner-Yes, Langer-Yes, and Askren-Yes. Results: Yes-4, No-0, Abstained-0. Motion carried.

Proposal 19-02, amend address point standards.

Mr. Toner moved to post Proposal 19-02 for the 30-day comments period. Roll call vote: Askren-Yes, Sydik-Yes, and Toner-Yes, Langer-Yes. Results: Yes-4, No-0, Abstained-0. Motion carried.

WORK GROUP UPDATES: OTHER BUSINESS

Tim Cao, OCIO Administrator, reported on the county server consolidation initiative. The counties have gone from 105 servers down to 4 servers. NACO (Nebraska Association of County Officials) is the organization responsible for these servers. There are 75 counties that are on the OCIO AS400. The

AS400 has 450 applications installed and operating. There are still nine counties left to consolidate their servers. The hardware cost savings for the counties is at 90% for some counties. The feedback from end users has been very positive. The courts and DMV are sharing these services. Their data is protected and replicated.

Mr. Becker provided an update on revisions to the accessibility and project review policies.

ADJOURNMENT

Mr. Askren moved to adjourn. All were in favor. Motion carried.

The meeting was adjourned at 10:42 a.m.

The meeting minutes were taken by Lori Lopez Urdiales and reviewed by Rick Becker of the Office of the CIO/NITC.

Projects Status Dashboard

June 2019

Enterprise Projects - Current

Agency/Entity	Project	NITC Designated
Department of Health and Human Services	New Medicaid Management Information System (MMIS)	7/8/2009
Department of Education	Nebraska State Accountability (NeSA)	7/8/2009
Nebraska Council of Regions	Nebraska Regional Interoperability Network (NRIN)	3/15/2010
Department of Health and Human Services	Medicaid Eligibility & Enrollment System	10/28/2014
Office of the CIO	Centrex Replacement	7/12/2018

Project Closure Report

Agency/Entity	Project	Reporting Started
Nebraska Council of Regions	Nebraska Regional Interoperability Network (NRIN)	3/15/2010

Note: Status is self-reported by the agency

Project Storyboard: 02 Centrex Conversion (65060012)

Project Manager	Kortus, Julie	Status Report Date	6/7/19	Project Dates			Status Report Indicators		
Project Type	Major Project	Status	Approved		Start	Finish	Overall	•	\rightarrow
Stage	Design	Progress	Started	Plan	10/10/17	2/14/20	Schedule	•	\rightarrow
Total Estimated Cost	\$2,800,000.00	Estimate to Complete		Baseline	10/10/17	6/30/20	Scope	•	\rightarrow
Actual Cost To Date				Days Late	-137	-137	Cost and Effort	•	\Rightarrow

Project Description

To secure the most cost efficient Hosted Voice Over Internet Protocol Telephony (VOIP) Services. This solution will replace the State's Centrex service throughout the State of Nebraska. The purpose of the project is to provide phone service that includes the most up-to-date VOIP features and functionality as a hosted service with equipment ownership, maintenance and service remaining with the Contractor.

Status Report Update

Sites which need additional bandwidth to have acceptable voice quality have been sent out for circuit bids. Most circuit upgrades have been ordered.

ALLO's team has begun assisting with the background work that the State's Voice team is performing to prepare the sites (floor plan, checking for Ethernet jacks in conference rooms, etc).

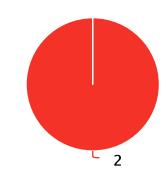
ALLO used a third party to spin up the servers and create the root certificate. The root certificate was turned over to the State to begin testing on 4/24/2019.

The Mitel telephones began displaying error messages on the test telephone screens when the certificates were pushed to them. The errors appeared to display as a result of the telephone using a port that was not configured for 802.1x. After retesting on a configured port, the error messages no longer appeared. A decision was made to enable 802.1x on all ports prior to phone installations and to proceed with the OCIO installation.

The phones were installed at the OCIO on May 29 and 30. Multiple telephones are receiving error messages. As of 6/7/2019 the error messages are still present. ALLO is working with the OCIO and Mitel to discover the cause of the messages. No further installations will be scheduled until the error message issue is resolved.

Issues by Priority Risks by Priority





Current Issues						More Issues
Iss	ue		Priority	Status	Target Resolution	Owner
Overlap of service	•	Open	12/31/19	Kortus, Julie		
Rates			•	Open	11/30/18	Kortus, Julie
Dependency on Network Resor	urces		•	Open	2/14/19	Kortus, Julie
Current Risks						More Risks
Risk	Probability	Impact	Priority	Status	Target Resolution	Owner
Bandwidth	•	•	•	Open	2/14/19	Kortus, Julie
Billing Developer being reassigned to another project	•	•	\$	Open	2/28/19	Kortus, Julie

Key Accomplishments

Upcoming Activities

Date: 6/7/19 10:59:27 AM CDT Page 1 of

Project Storyboard: Medicaid Eligibility & Enrollment System

Project Manager	Spaulding, Don	Status Report Date	6/7/19	Project Dates			Status Report Indicators		
Project Type		Status	Approved		Start	Finish	Overall	♦ →	
Stage	Build	Progress	Started	Plan	6/1/18	4/30/22	Schedule	♦ →	
Total Estimated Cost	\$81,200,000.00	Estimate to Complete	77.98%	Baseline	6/1/18	4/30/22	Scope	♦ →	
Actual Cost To Date	\$63,318,485.00			Days Late	0	0	Cost and Effort	♦ →	

Key Accomplishments

Upcoming Activities

Project Description

The Affordable Care Act (ACA) included numerous provisions with significant information systems impacts. One of the requirements was to change how Medicaid Eligibility was determined and implement the changes effective 10/1/2014. As a result of the lack of time available to implement a long-term solution, the Department of Health and Human Services implemented a short-term solution in the current environment to meet initial due dates and requirements. This solution did not meet all Federal technical requirements for enhanced Federal funding but was approved on the assumption that a long-term solution would be procured. An RFP was developed and procurement has been completed with Wipro selected as the Systems Integrator for the IBM/Curam software.

Status Report Update

Gartner, Inc. has been hired to conduct the assessment of the EES II project, and began work 06/04/19. Gartner's objectives are to provide 5 deliverables, including an environmental assessment, a comprehensive alternatives analysis, and a roadmap with actionable recommendations for implementing an Eligibility and Enhancement modernization project.

The final roadmap is to be delivered by the end of August, 2019.

Issues by Priority Risks by Priority Current Issues

No matching records were found

Date: 6/7/19 10:59:27 AM CDT

Project Storyboard: Medicaid Management Information System Replacement Project (MMIS)

Project Manager	Spaulding, Don	Status Report Date	6/5/19		Project Dates		Status Repor	t Indicators
Project Type	Major Project	Status	Approved		Start	Finish	Overall	•
Stage	Build	Progress	Started	Plan	7/1/14	5/31/19	Schedule	•
Total Estimated Cost	\$113,600,000.00	Estimate to Complete	14.74%	Baseline	7/1/14	5/31/19	Scope	•
Actual Cost To Date	\$16,748,930.00			Days Late	7	7	Cost and Effort	•

Project Description

Medicaid and Long-Term Care (MLTC) has undertaken a strategic transformation toward a vision for a Medicaid enterprise that is fundamentally data-driven. This project supports the programmatic shift by giving the stakeholders access to claims and clinical data and appropriate analytic tools. This project of building a comprehensive data management and analytics (DMA) platform is aligned with the CMS modular approach to building system and operational capabilities. The current system consisting of legacy MMIS and Truven DW/DSS has several limitations that warrant the need to re-engineer the data management and analytical operations. The DMA system is envisioned to be the core repository for the State to address all its information and data needs.

Key Accomplishments

- Completed deliverable reviews, and acceptance activities for the Operations Privacy and Security Plan, and User Support Plan.
- Completed deliverable expectation document (DED) reviews for multiple deliverables.
- Concurrent deliverable reviews are ongoing for many items, including Third Party Cyber Security Assessment, Data Retention and Archive Plan, User Documentation, and Operations Readiness Plan, among others.
- The State is continuing to work with Deloitte to refine content and functionality for previously rejected DDI contract deliverables, which lacked completeness for acceptance.
- Continued DMA Managed Care Entity (MCE) outreach and planning efforts.
- The State completed a review of RFP requirements internally and with Deloitte to finalize what is required for go-live.
- Continued development efforts towards the remaining RFP DDI scope.
- The State UAT execution is in progress. The UAT test case authoring is near completion.
- Continued Medicaid Enterprise Certification Lifecycle (MECL) Review 2 (R2) certification efforts including certification criteria mapping, delivering Certification Evidence Documents (CEDs) for checklist items to IV&V, and collecting evidence.
- The State completed an analysis of the MECL R1 mapping to the RFP requirements to confirm that certification requirements will be implemented at the appropriate time.
- Continued organizational change management (OCM) activities including hiring a new resource as OCM lead, OCM Project Posters, surveys, and weekly briefs, among others.
- Completed Training plan review with Deloitte and continued review of training materials; including job aides and web based training (WBT) modules.

Status Report Update

The DMA project completed its initial discovery, requirements, creation of user stories and majority of development activities in concert with systems integration partner and vendor, Deloitte Consulting, LLP.

The project is delayed primarily due to longer than anticipated timeframe for development of functionality. The State is actively working with the vendor towards establishing a revised DDI schedule considering the remaining content for CMS certification and RFP requirements to be developed prior to go-live. Regular project activities continue to progress, including but not limited to User Acceptance Testing (UAT), relevant deliverable reviews, some sprint ceremonies, and release reviews, among others.

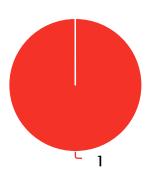
Upcoming Activities

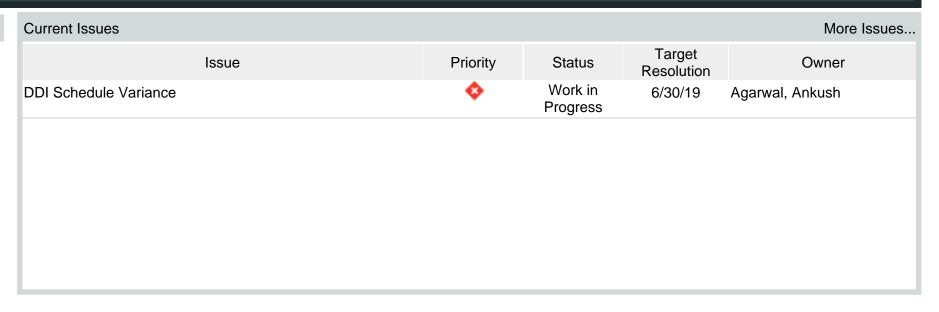
- Work with Deloitte on a new DDI schedule and go-live date.
- Complete Deliverable and DED review, acceptance and approval activities for upcoming and in-flight work products.
- Complete quarterly and monthly reviews of requisite deliverables.
- Complete the next stage of a rolling, monthly updated, 120-day forward-looking project plan window.
- Finalize Third Party Cyber Security Assessment, Data Retention and Archive Plan, User Documentation, and Operations Readiness Plan, among others.
- Review and garner State approval on past Releases, and plan for verification of upcoming release(s).
- Finalize go-forward interface control documents.
- Continue organizational change management (OCM) activities.
- Work on upcoming Operational readiness activities including go-live planning.
- Finalize HIA end users list with feedback from State Management.
- Conclude UAT test case and script development for recent release(s).
- Continue DMA Truven migration and sunset planning.
- Continue to work on training activities and go-forward plan with Deloitte.
- Complete UAT test case execution to ensure the product functionality meets contractual requirements and State's expectations.
- Complete the Project Partnership Understanding (PPU) updates and submit to CMS.
- Continue MECL R2 certification planning and documentation efforts using CMS's Medicaid Enterprise Certification Toolkit (MECT) framework.

Date: 6/7/19 10:59:27 AM CDT

Project Storyboard: Medicaid Management Information System Replacement Project (MMIS)

Issues by Priority Risks by Priority





Date: 6/7/19 10:59:27 AM CDT

Project Storyboard: Nebraska Regional Interoperability Network (NRIN)

Project Manager	Krogman, Sue	Status Report Date	4/8/19		Project Dates		Status Report Indicators	3	
Project Type	Major Project	Status	Approved		Start	Finish	Overall	•	\Rightarrow
Stage	Launch	Progress	Completed	Plan	10/1/10	8/31/19	Schedule	•	\Rightarrow
Total Estimated Cost	\$12,500,000.00	Estimate to Complete	96.00%	Baseline	10/1/10	8/31/19	Scope	•	\Rightarrow
Actual Cost To Date	\$12,000,000.00			Days Late	0	0	Cost and Effort	•	\rightarrow

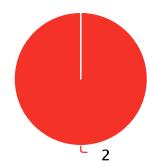
Project Description

The Nebraska Regional Interoperability Network (NRIN) is a project that will connect a majority of the Public Safety Access Points (PSAP) across the State by means of a point to point microwave system. The network will be a true, secure means of transferring data, video and voice. Speed and stability are major expectations; therefore there is a required redundant technology base of no less than 100 mbps with 99.999% availability for each site. It is hoped that the network will be used as the main transfer mechanism for currently in-place items, thus imposing a cost-saving to local government. All equipment purchased for this project is compatible with the networking equipment of the OCIO.

Status Report Update

Tower work is just beginning again after the blizzards and flooding across Nebraska. Many sites are still under water, so, adjustments are being made to locations. Router work still continues to try and address some issues.

Issues by Priority Risks by Priority



Upcoming Activities

Key Accomplishments

Current Risks						More Risks
Risk	Probability	Impact	Priority	Status	Target Resolution	Owner
Finding adequate towers to locate the NRIN system on	♦	•	•	Open	5/6/16	Weekly, Andy
MOUs and Lease Agreements	\$	•	.	Open	5/6/16	Weekly, Andy

Date: 6/7/19 10:59:27 AM CDT Page 5 of

Project Storyboard: Nebraska State Accountability (NeSA- Reading, Math, Science and Writing)

Project Manager	Heneger, Jeremy	Status Report Date	4/8/19		Project Dates		Status Report Indicator	S
Project Type	Major Project	Status	Approved		Start	Finish	Overall	♦ →
Stage	Launch	Progress	Completed	Plan	7/1/17	6/30/19	Schedule	♦ ⇒
Total Estimated Cost	\$9,781,606.00	Estimate to Complete	100.00%	Baseline	7/1/17	11/30/18	Scope	→ →
Actual Cost To Date	\$9,781,606.00			Days Late	212	212	Cost and Effort	♦ →

Project Description

Legislative Bill 1157 passed by the 2008 Nebraska Legislature required a single statewide assessment of the Nebraska academic content standards for reading, mathematics, science, and writing in Nebraska's K-12 public schools. The new assessment system was named Nebraska State Accountability (NeSA), with NeSA-R for reading assessments, NeSA-M for mathematics, NeSA-S for science, and NeSA-W for writing. The assessments in reading and mathematics were administered in grades 3-8 and 11; science was administered in grades 5, 8, and 11; and writing was administered in grades 4, 8, and 11.

Status Report Update

Request to change the name of the project to "Nebraska Student-Centered Assessment System (NSCAS) Formally (NeSA)"

NSCAS testing window opened March 18, 2019. ACT will open April 2, 2019. The 2019-2020 State Assessment contract renewal process is moving forward as the NDE State Board of Education will begin to review the updates and recommendations from the commissioner during the April "Work Session" portion of the monthly State Board Meeting. Approval of next year's contracts will be done during the May State Board of Education meeting.

Issues by Priority Risks by Priority



Upcoming Activities

Key Accomplishments

Current Risks						More Risks
Risk	Probability	Impact	Priority	Status	Target Resolution	Owner
District Infrastructure	•	•	•	Open	2/8/19	Weekly, Andy
Technology Readiness	•	•	•	Open	2/8/19	Weekly, Andy

Date: 6/7/19 10:59:27 AM CDT Page 6 of

Project Lessons Learned Form

General Information	1							
Project Name							Date	e
Nebraska Regiona Point to Point Micr				a PS	SAP's		05/0	01/2019
Sponsoring Agency								
Nebraska Emerge	ncy Managem	nent Aç	gency (NEMA)					
Contact		Phone Email				Emp	oloyer	
Sue Krogman		402-4	171-7429	sue.krogman@nebraska.gov			Emergency Management	
Project Manager		Phone)	Em	ail		Employer	
Sue Krogman		402-4	171-7429	sue	e.krogman@nebras	ska.gov		ergency nagement
Project Start Date	7/1/2012		Report End Date	•	6/30/2019	Project End D	ate	6/30/2021
Key Questions						Explanation)	
1. Did the scope of	f the project c	hange	?		⊠ Yes □ No			as well as tower structures.
2. Did the project meet the expectations of the stakeholders? ☐ Yes ☐ No Yes.								
3. Did the project of	costs exceed t	the bu	dget provided?		☐ Yes 🖾 No	No.		

Cost Management Show the actual expenditures compared to planned levels. Break the costs into other categories as appropriate.									
2013-2016									
Budget Item	Budget at Completion (BAC)	Actual Costs (AC)	Cost Variance (CV = BAC – AC)						
Salaries			0						
Contract Services	12,000.00	9,500.00	2,500.00						
Hardware									
Software									
Training									
Other Expenditures*									
Total Costs	12,000.00	9,500.00	2,500.00						
Other Expenditures include supplies, materia	als, etc.								

Significant Project Milestones Insert additional lines as necessary.									
Milestone	Met	Not Met	Original Date	Actual Date	Impact (if late)				
Panhandle Signoff	\boxtimes		6/2012	6/2012					
East to West Connection	\boxtimes		12/2016	2/2017					
Regional Functionality			6/2016		Waiting on equipment, contractor and Region.				

What went wrong during the project and recommendations to avoid similar occurrences in the future

Provide a summary of what went wrong during the project, including the problem or issue, the impact and the recommendation to avoid those occurrences in the future.

Through the life cycle of the entire project, there were several challenges that needed to be addressed. The primary challenge was the reliance off the contractor as well as the amount of grant dollars received on an annual basis. There has not always been enough dollars to keep the contractor actively employed, so, other jobs took precedence over this one and, as a result, delays on construction have been huge.

A key recommendation for the future would be to incent the desired outcomes through either statutory requirements or fiscal support for meeting the expectations.

What went right during the project and how similar projects may benefit from this information

Provide a summary of what went right during the project, including the success or accomplishment, the impact and how future projects may benefit from this information.

As the network is still not complete, the primary goal for accomplishment is the installation. Operations in areas where connectivity is complete is functional and the network is working as anticipated.

NITC Reporting/Process Improvements and Recommendations

Use this section to insert NITC Enterprise Reporting improvements and recommendations.

I think the reporting process worked well. There were just enough "in-person" meetings and keeping a timeline of progress on this has been beneficial to all parties.

Additional Comments

Use this section to insert comments / concerns not included in any other section.

This project, once completed, will be a huge asset to the public safety community for the entire state. The network has been challenged on multiple occasions and corrections were made with minimal configurations and equipment replacement.

Attachment 5-a

State of Nebraska Nebraska Information Technology Commission Technical Standards and Guidelines

Proposal 19-01

A PROPOSAL relating to GIS data; to amend section 3-205; and to repeal the original section.

Section 1. The following provisions constitute a revised section 3-205:

3-205. Street centerlines.

- (1) The commission adopts by reference sections 2, 3, and 3.1 of the NENA Standard for NG9-1-1 GIS Data Model (National Emergency Number Association, NENA-STA-006.1-2018, June 16, 2018, https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-sta-006_ng9-1-1_gis_dat.pdf) for GIS data that consists of street centerlines.
 - (2) The following are optional additional attributes for street centerlines:

From Road Level	FromLevel	0	Р	1
To Road Level	ToLevel	0	Р	1

FromLevel: Specifies the 'elevation' of a segment FROM node (start point). This field does not require actual elevation in terms of real-world measurements. The value is only used to determine whether a turn is allowed from one street to a street that intersects it in a 2-dimensional space, similar to floors in a building. Nodes at the lowest level would be assigned 0, with overlapping nodes representing additional level(s)/overpass(es) will be assigned the next sequential integer value accordingly.

ToLevel: Specifies the 'elevation' of a segment TO node (end point). This field does not require actual elevation in terms of real-world measurements. The value is only used to determine whether a turn is allowed from one street to a street that intersects it in a 2-dimensional space,

similar to floors in a building. Nodes at the lowest level would be assigned 0, with overlapping nodes representing additional level(s)/overpass(es) will be assigned the next sequential integer value accordingly.

- Sec.2. Original section 3-205 is repealed.
- Sec.3. This proposal takes effect when approved by the commission.

Attachment 5-b

State of Nebraska Nebraska Information Technology Commission Technical Standards and Guidelines

Proposal 19-02

A PROPOSAL relating to GIS data; to amend section 3-206; and to repeal the original section.

Section 1. The following provisions constitute a revised section 3-206:

3-206. Address points.

The commission adopts by reference sections 2, 3, and 3.2 of the NENA Standard for NG9-1-1 GIS Data Model (National Emergency Number Association, NENA-STA-006.1-2018, June 16, 2018, https://cdn.ymaws.com/www.nena.org/resource/resmgr/standards/nena-sta-006_ng9-1-1_gis_dat.pdf) for GIS data that consists of address points.

- Sec.2. Original section 3-206 is repealed.
- Sec.3. This proposal takes effect when approved by the commission.

Attachment 5-c

State of Nebraska Nebraska Information Technology Commission Technical Standards and Guidelines

Proposal 19-03

A PROPOSAL relating to the accessibility policy; to amend section 2-101 and subsection (156) of section 1-101; and to repeal the original section and subsection.

Section 1. Section 2-101 is amended to read:

- 2-101. Accessibility policy.
- (1) Purpose. This policy contains scoping and technical requirements for information and communication technology ("ICT") to ensure accessibility and usability by individuals with disabilities.
- (2) <u>Definitions</u>. For the purpose of this section, terms defined in referenced documents and not defined in section 1-101 will have the meaning as defined in the referenced documents.
- (3) Standards. ICT that is procured, developed, maintained, or used by state agencies shall conform to the following standards: Revised 508 Standards, 36 C.F.R. § 1194 (2018)

 [https://www.govinfo.gov/content/pkg/CFR-2018-title36-vol3/xml/CFR-2018-title36-vol3-part1194.xml].

For the State of Nebraska, the Revised 508 Standards referenced in this subsection are revised as follows:

- (a) In E103.4, replace the definition of "Existing ICT" with the following: "Existing ICT. ICT that has been procured, maintained or used on or before November 14, 2020.";
- (b) In E202.2, replace the existing language with the following: "Legacy ICT. Any component or portion of existing ICT that complies with an earlier standard adopted by the commission, and

that has not been altered on or after November 14, 2020, shall not be required to be modified to conform to the Revised 508 Standards.";

- (c) In E202.3, replace the existing language with the following: "Public Safety Systems. The Revised 508 Standards do not apply to any ICT operated by state agencies as part of a public safety system.";
- (d) In E202.4, replace the existing language with the following: "State Contracts. ICT acquired by a contractor incidental to a contract shall not be required to conform to the Revised 508 Standards."; and
- (e) In E203.1, replace the existing language with the following: "General. Agencies shall ensure that all functionality of ICT is accessible to and usable by individuals with disabilities, either directly or by supporting the use of assistive technology, and shall comply with E203. In providing access to all functionality of ICT, agencies shall ensure the following: A. That state employees with disabilities have access to and use of information and data that is comparable to the access and use by state employees who are not individuals with disabilities; and B. That members of the public with disabilities who are seeking information or data from a state agency have access to and use of information and data that is comparable to that provided to members of the public who are not individuals with disabilities.".
- (4) Guidelines. In addition to the web content requirements contained in the referenced standards in subsection (3), the commission recommends compliance with the following guidelines: Web Content Accessibility Guidelines 2.1, W3C World Wide Web Consortium Recommendation 05 June 2018 [https://www.w3.org/TR/2018/REC-WCAG21-20180605/].

1. Authority

The commission shall "[a]dopt minimum technical standards, guidelines, and architectures upon recommendation by the technical panel..." Neb. Rev. Stat. § 86-516(6).

2. Purpose and Objectives

The purpose of this document is to define and clarify policies, standards, and guidelines that will help agencies meet the needs of people with disabilities.

Neb. Rev. Stat. §73-205 required the Commission for the Blind and Visually Impaired, the Nebraska Information Technology Commission, and the Chief Information Officer to develop a technology access clause by January 1, 2001. The Technology Access Clause applies to all purchases of information technology. The clause includes the following provisions:

"The intent and purpose of these standards is to ensure that the needs of Nebraskans with disabilities are met through reasonable accommodation of the information technology products and services of the state. Future information technology products, systems, and services including data, voice, and video technologies, as well as information dissemination methods, will comply with the following standards to the greatest degree possible."

- 1. Effective, interactive control and use of the technology including, but not limited to, the operating system, applications programs, and format of the data presented must be readily achievable by individuals with disabilities. The intent is to make sure that all newly procured information technology equipment; software and services can be upgraded, replaced or augmented to accommodate individuals with disabilities.
- 2. Information technology made accessible for individuals with disabilities must be compatible with technology used by other individuals with whom the individual with a disability must interact.
- 3. Information technology made accessible for individuals with disabilities must be able to be integrated into networks used to share communications among employees, program participants, and the public.
- 4. Information technology made accessible for individuals with disabilities must have the capability of providing equivalent access to telecommunications or other interconnected network services used by the general population.

- 5. These provisions do not prohibit the purchase or use of an information technology product that does not meet these standards provided that:
- a. There is no available means by which the product can be made accessible and there is no alternate product that is or can be made accessible; or
- b. The information manipulated or presented by the product is inherently unalterable in nature (i.e., its meaning cannot be preserved if it is conveyed in an alternative manner).
- c. The product is used in conjunction with an existing information technology system, and modifying the existing system to become accessible would create an undue burden.
- d. The agency must be able to modify or replace the information technology product with one that will accommodate the needs of individuals with disabilities.

"When development, procurement, maintenance, or use of electronic and information technology does not meet these standards, individuals with disabilities will be provided with the information and data involved by an alternative means of access that allows the individual to use the information and data."

The primary objectives of accessibility standards and guidelines include:

- 1. Where feasible, people with disabilities can use the same information technology systems as people without disabilities;
- 2. Early planning for accessibility will make it easier to provide reasonable accommodations when information technology systems are not accessible
 - 3. Standards and Guidelines
 - 3.1. Functional Performance Criteria (Section 1194.31)
 - 3.1.1 General-Alternative Access
 - 3.1.1.1

At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.

3.1.1.2

At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.

3.1.1.3

At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided.

3.1.1.4

Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.

3.1.1.5

At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.

3.1.1.6

At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.

3.2 Software Applications and Operating Systems (Section 1194.31)

3.2.1 Navigation

3.2.1.1

When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.

3.2.1.2

A well-defined, on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.

3.2.2 Image/Information Display

3.2.2.1

Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.

3.2.2.2

When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.

3.2.2.3

Textual information shall be provided through operating system functions for displaying text.

The minimum information that shall be made available is text content, text input caret location, and text attributes.

3.2.2.4

Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2Hz and lower than 55 Hz.

3.2.3 Compatibility

3.2.3.1

Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.

3.2.4 Use of Color

3.2.4.1

Applications shall not override user selected contrast and color selections and other individual display attributes.

3.2.4.2

Color-coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

3.2.4.3

When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.

3.2.5 Animation

3.2.5.1

When animation is displayed, the information shall be displayable in at least one nonanimated presentation mode at the option of the user.

3.2.6 Forms

3.2.6.1

When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all direct ions and cues.

3.3 Web-Based Internet Information and Applications (Section 1194.22)

3.3.1 Navigation

3.3.1.1

Redundant text links shall be provided for each active region of a server-side image map.

3.3.1.2

Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.

3.3.1.3

Row and column headers shall be identified for data tables.

3.3.1.4

Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.

3.3.1.5

Frames shall be titled with text that facilitates frame identification and navigation.

3.3.1.6

A method shall be provided that permits users to skip repetitive navigation links.

3.3.2 Image/Information Display

3.3.2.1

Documents shall be organized so they are readable without requiring an associated style sheet.

3.3.2.2

Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2Hz and lower than 55 Hz.

3.3.2.3

A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in

any other way. The content of the text-only page shall be updated whenever the primary page changes.

3.3.2.4

When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.

3.3.2.5

When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with the provisions of Section 2 (Software Applications and Operating Systems), above.

3.3.3 Information Display Alternatives

3.3.3.1

A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).

3.3.3.2

Equivalent alternatives f or any multimedia presentation shall be synchronized with the presentation.

3.3.3.3 Use of Color

3.3.3.1 Web pages shall be designed so that all information conveyed with color is al so available without color, for example from context or markup.

3.3.3.4 Forms

3.3.3.4.1 When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.

3.3.3.5 Time Responses

3.3.3.5.1 When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.

3.4 Telecommunications Products (Section 1194.23)

3.4.1 Image/Information Display

3.4.1.1

Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.

3.4.1.2

Products that transmit or conduct information or communication shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format.

Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.

3.4.2 Technology Links Compatibility

3.4.2.1

Telecommunications products or systems, which offer voice communication but do not include TTY functionality, shall provide a standard non-acoustic connection point for TTYs.

Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.

3.4.2.2

Telecommunications products, which include voice communication functionality, shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.

3.4.2.3

Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.

3.4.2.4

Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.

3.4.3 Volume Control

3.4.3.1

For transmitted voice signals, telecommunications products shall provide again adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.

3.4.3.2

If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.

3.4.4 Voice Mail

3.4.4.1

Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.

3.4.4.2

Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.

3.4.5 Controls or Keys/Physical Operation

3.4.5.1

Products, which have mechanically operated controls or keys, shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.

3.4.5.2

Products which have mechanically operated controls or keys shall comply with the following:

Controls and Keys shall be operable with one hand and shall not require tight grasping,

pinching, twisting of the wrist. The force required to activate controls and keys shall be 5lbs.

(22.2N)maximum.

3.4.5.3

Products, which have mechanically operated controls or keys, shall comply with the following: If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.

3.4.5.4

Products which have mechanically operated controls or keys shall comply with the following:

The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.

3.5 Video and Multi-Media Products (Section 1194.24)

3.5.1 TV

3.5.1.1

All analog television displays 13 inches and larger, and computer equipment that includes analog tele vision receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, wide screen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.

3.5.1.2

Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.

3.5.2 Video and Multi-Media

3.5.2.1

All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.

3.5.2.2

All training and informational video and multimedia productions, which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.

3.5.3.2

Display or presentation of alternate text presentation or audio descriptions shall be userselectable unless permanent.

3.6 Self-Contained, Closed Products (Section 1194.25)

3.6.1

Self-contained products shall be usable by people with disabilities without requiring an enduser to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.

3.6.2 Response Time

3.6.2.1

When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.

3.6.3 Controls or Keys/Physical Operation

3.6.3.1

Where a product utilizes touch screens or contact-sensitive controls, an input method shall be provided that complies with the provisions in Section 4.e, above.

3.6.3.2

When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.

3.6.4 Audio/Voice Output

3.6.4.1

When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at any time.

3.6.4.2

When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.

3.6.4.3 Use of Color

3.6.4.3.1 Color-coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

3.6.4.3.2 When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.

3.6.4.4 Image/Information Display

3.6.4.4.1 Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.

3.6.4.5 Location Accessibility

3.6.4.5.1 Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length on products which are freestanding, non-portable, and intended to be used in one location and which have operable controls.

3.6.4.5.2 Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.

3.6.4.5.3 Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.

3.6.4.5.4 Products, which are free standing, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Operable controls shall not be more than 24 inches behind the reference plane.

3.7 Desktop and Portable Computers (Section 1194.26)

3.7.1

Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.

3.7.2 Controls or Keys/Physical Operation

3.7.2.1

All mechanically operated controls and keys shall comply with the provisions of Section 4.3, above.

3.7.2.2

If a product utilizes touch screens or touch-operated controls, an input method shall be provided that complies with the provisions of section 4.3, above.

3.7.3

When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.

4. Definitions

Agency: shall mean any governmental entity, including state government, local government, or third party entities under contract to the agency.

Alternate formats: are usable by people with disabilities and may include, but are not limited to, Braille, ASCII text, large print, recorded audio, and electronic formats that comply with this part.

Alternate methods: are different means of providing information, including product documentation, to people with disabilities. Alternate methods may include, but are not limited to, voice, fax, relay service, TTY, Internet posting, captioning, text-to-speech synthesis, and audio description.

Assistive technology: includes any item, piece of equipment, or system, whether acquired commercially, modified, or customized, that is commonly used to increase, maintain, or improve functional capabilities of individuals with disabilities.

Electronic and information technology: includes information technology and any equipment or interconnected system or subsystem of equipment, that is used in the creation, conversion, or duplication of data or information. The term electronic and information technology includes, but is not limited to, telecommunications products (such as telephones) information kiosks, and transaction machines, World Wide Websites, multimedia, and office equipment such as copies and fax machines. The term does not include any equipment that contains embedded information technology that is used as an integral part of the product, but the principal function

of which is not the acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. For example, HVAC (heating, ventilation, and air conditioning) equipment such as thermostats or temperature control devices, and medical equipment where information technology is integral to its operation, are not information technology.

Equivalent facilitation: provides that nothing in this part is intended to prevent the use of designs or technologies as alternatives to those prescribed in this part provided they result in substantially equivalent or greater access to and use of a product for people with disabilities.

Information technology: is any equipment or interconnected system or subsystem of equipment, that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information. The term information technology includes computers, ancillary equipment, software, firmware and similar procedures, services (including support services), and related resources.

Operable controls: are the component of a product that requires physical contact for normal operation. Operable controls include, but are not limited to, mechanically operated controls, input and output trays, card slots, keyboards, or keypads.

Product: is an electronic and information technology.

Self-contained, Closed Products: are products that generally have embedded software and are commonly designed in such a fashion that a user cannot easily attach or install assistive technology. These products include, but are not limited to, information kiosks and information transaction machines, copiers, printers, calculators, fax machines, and other similar types of products.

Telecommunications: are the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.

TTY: is an abbreviation for teletypewriter. Machinery or equipment that employs interactive text based communications through the transmission of coded signals across the telephone network. TTY's may include, for example, devices known as TDDs (telecommunication display devices) or telecommunication devices for deaf persons) or computers with special modems.

TTYs are also called text telephones.

Undue burden: means significant difficulty or expense. In determining whether an action would result in an undue burden, an agency shall consider all agency resources available to the program or component for which the product is being developed, procured, maintained, or used.

5. Applicability

General Statement

These policies are intended to be sufficiently generic to apply to a wide range of governmental and educational agencies in the State of Nebraska. Each agency or operational entity must develop detailed procedures to implement broad policies and standards.

Compliance with these accessibility policies and standards will be a requirement during consideration of funding for any projects requiring review by the NITC. Compliance may be used in audit reviews or budget reviews.

Compliance and Enforcement Statement

The Governing board or chief administrative officer of each organization must develop internal compliance and enforcement policies as part of its information accessibility efforts. Such policies should be reasonable and effective. The NITC intends to incorporate adherence to accessibility policies as part of its evaluation and prioritization of funding requests. The NITC recommends that the Governor and Legislature give due consideration to requests for accessibility improvements during the budget process.

6. Responsibility

An effective program for accessibility involves cooperation of many different entities. Major participants and their responsibilities include:

6.1 Nebraska Information Technology Commission

The NITC provides strategic direction for state agencies and educational institutions in the area of information technology. The NITC also has statutory responsibility to adopt minimum technical standards and guidelines for acceptable and cost-effective use of information technology. Implicit in these requirements is the responsibility to promote adequate accessibility for information systems through adoption of policies, standards, and guidelines.

6.2 Technical Panel Accessibility Work Group

The NITC Technical Panel, with advice from the Accessibility Work Group, has responsibility for recommending accessibility policies and guidelines and making available best practices to operational entities.

6.3 Assistive Technology Partnership

The Nebraska Assistive Technology Partnership provides training, loan devices and support for accommodations in compliance with Section 508 and the Technology Access Clause.

Training and support is available to governmental agencies, schools, businesses, and non-profit organizations.

6.4 University of Nebraska Accommodation Resource Center

The Accommodation Resource Center (ARC) provides training, loan devices and support for accommodation using assistive technology in both the education and employment environment.

The ARC website

6.5 Federal Information Technology Accessibility Initiative

The Federal Information Technology Accessibility Initiative (FITA) is an interagency effort, coordinated by the General Services Administration, to offer technical assistance and to provide an information means of cooperation and sharing of information on implementation of Section 508. Questions about 508 standards can be sent to 508@access-board.gov.

6.6 Web Accessibility Initiative

The Web Accessibility Initiative has created guidelines, which are grouped by priority and are very similar to the final Section 508 rules. The guidelines can be found at <u>W3</u>.

6.7 Agency and Institutional Heads

The highest authority within an agency or institution is responsible for accessibility of information resources that are consistent with this policy. The authority may delegate this responsibility but delegation does not remove the accountability.

6.8 Information Technology Staff

Technical staff must be aware of the opportunities and responsibility to meet the goals of accessibility of information systems.

- 7. Related Policies, Standards and Guidelines
- 1. Nebraska Technology Access Clause
- 2. Nebraska Technology Access Clause Checklist (Questions to Consider)
- a. Desktop and Portable Computers
- b. Video and Multimedia Products
- c. Software Application and Operating Systems
- d. Self-Contained, Closed Products
- e. Telecommunications Products
- f. Web Page Accessibility Questionnaire
- 3. Section 504 of the Rehabilitation Act
- 4. Electronic and Information Technology Accessibility Standards, Architectural and Transportation Barriers Compliance Board, 36 CFR Part 1194 can be found at Access-Board.
 - Sec. 2. Subsection (156) of section 1-101 is amended to read:
- (156) "Web page" means <u>a non-embedded resource obtained from a single Universal</u>

 Resource Identifier (URI) using Hypertext Transfer Protocol (HTTP) plus any other resources

 that are provided for the rendering, retrieval, and presentation of content a document stored on a server, consisting of an HTML file and any related files for scripts and graphics, viewable

through a web browser on the World Wide Web. Files linked from a web page such as Word (.doc), Portable Document Format (.pdf), and Excel (.xls) files are not web pages, as they can be viewed without access to a web browser.

Sec. 3. Original section 2-101 and subsection (156) of section 1-101 are repealed.

Sec. 4. This proposal takes effect when approved by the commission.