

# MEETING AGENDA

## Technical Panel of the Nebraska Information Technology Commission

Tuesday, February 8, 2011  
9:00 a.m.  
Varner Hall - Board Room  
3835 Holdrege St., Lincoln, Nebraska

### AGENDA

Meeting Documents: Click the links in the agenda  
or [click here](#) for all documents (37 pages).

1. Roll Call, Meeting Notice & Open Meetings Act Information
2. Public Comment
3. Approval of Minutes\* - [December 14, 2010](#)
4. Enterprise Projects
  - [Project Updates](#) - Skip Philson
5. Standards and Guidelines
  - Recommendations to the NITC\*
    - [NITC 3-202](#): Land Record Information and Mapping Standard (Revised)
      - Comments Received (None)
      - GIS Council Recommendation: Approve
    - [NITC 5-101](#): Enterprise Content Management System for State Agencies
      - Comments Received (None)
      - State Government Council Recommendation: Table
    - [NITC 5-204](#): Linking a Personal Portable Computing Device to the State Email System for Data Classified as "Internal Use Only" or "Unclassified/Public"
      - [Comments Received](#) (1) (Revised version of Attachment A from Brad Weakly)
      - State Government Council Recommendation: Approve
  - Request for Waiver\*
    - Kronos Steering Committee (NDCS/DHHS/OCIO) [request for waiver](#) from requirements contained in [NITC 8-301](#). - Brad Weakly
6. Regular Informational Items and Work Group Updates (as needed)
  - Accessibility of Information Technology Work Group - Christy Horn
  - Learning Management System Standards Work Group - Kirk Langer
  - Security Architecture Work Group - Brad Weakly
7. Other Business
8. Adjourn

\* Denotes Action Item

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

NITC and Technical Panel websites: <http://nitc.ne.gov/>

Meeting notice was posted to the NITC website and [Nebraska Public Meeting Calendar](#) on January 7, 2011. The agenda was posted to the NITC website on February 4, 2011.

**TECHNICAL PANEL**  
of the  
**Nebraska Information Technology Commission**  
Tuesday, December 14, 2010, 9:00 a.m.  
Varner Hall - Board Room  
3835 Holdrege Street, Lincoln, Nebraska  
**PROPOSED MINUTES**

**MEMBERS PRESENT:**

Walter Weir, CIO, University of Nebraska, Chair  
Brenda Decker, CIO, State of Nebraska  
Christy Horn, University of Nebraska  
Kirk Langer, Lincoln Public Schools

**MEMBERS ABSENT:** Mike Winkle, NET

**ROLL CALL, MEETING NOTICE & OPEN MEETINGS ACT INFORMATION**

Mr. Weir called the meeting to order at 9:05 a.m. There were four members present at the time of roll call. A quorum existed to conduct official business. Meeting notice was posted to the NITC website and [Nebraska Public Meeting Calendar](#) on November 5, 2010. The agenda was posted to the NITC website on December 10, 2010 and revised on December 13, 2010. A copy of the Open Meetings Act was posted on the South wall of the meeting room.

**PUBLIC COMMENT**

There was no public comment.

**APPROVAL OF OCTOBER 12, 2010 MINUTES**

**Ms. Decker moved to approve the [October 12, 2010](#) meeting minutes as presented. Mr. Langer seconded. Roll call vote: Decker-Yes, Horn-Yes, Langer-Yes, and Weir-Yes. Results: Yes-4, No-0, Abstained-0. Motion carried.**

**ENTERPRISE PROJECT - FINAL REPORTS**

Administrative Services-State Personnel - Talent Management Software Solution  
Mike McCrory and Dovi Mueller, Administrative Services-Personnel Division

The Talent Management system has multiple components for human capital management. The vendors selected for the project were Cornerstone and Neogov. Since the project went live in June, there have been over 32,000 applications submitted. Agencies have been impressed and thankful for the new system. Prior to developing the project, AS-Personnel solicited the support and needs from agencies. It is an easy web-based application.

The AS-Transportation Service Bureau Defensive Driving Course is available on-line through the Learning Management component. The Red Cross is interested in providing on-line training through the Learning Management component. Some agencies have expressed interest in having certification and/or licensing courses available. The On-Board component will soon go live. The State CIO serves on the project's Action Team that handles technical issues that the project team cannot address.

The Open Enrollment Benefits option is currently being developed. Mr. Weir suggested that the project contact Keith Dietz at University of Nebraska. He has done this work for the University. Another model that is being developed is the Employee Performance Evaluation. The Governor would like the State of Nebraska to have a more centralized process for performance

evaluations. The project has done some testing with the Department of Health and Human Services. Cornerstone will be coming in January to work with the project team.

Ms. Horn asked if there had been tests for accessibility. The testing for 508 compliance will occur in January. Ms. Horn also mentioned the importance of having videos captioned.

The Technical Panel determined that the Project should continue to provide status reports because additional components are still being implemented.

Mr. Weir requested that the project document lessons learned (positive and negative) after each component implementation.

University of Nebraska and State College System - NeSIS and SAP  
Don Mihulka, Project Director

Mr. Mihulka distributed a written report to members. NeSIS and SAP have had over 50 consultants and 250 fulltime staff working on the project. There were 8,100 tasks identified at the beginning of the project. There are approximately 92 left to complete. High priorities that the project is currently addressing include:

- EPM Data Warehousing and Reporting
- Year end-processing
- Parent/Guest Access Modification
- Installation and testing of Bundle 19 (maintenance), Bundle 20 (financial aide), and SOA Online application releases 2.05 and 2.1
- Post Implementation Team

Ms. Horn stated that she has concerns regarding accessibility. Penn State is currently going through this issue at their institution. At the University of Nebraska, this continues to be an issue even though there have been discussions with Oracle.

Mr. Mihulka will set up a January meeting with Oracle, project staff and Ms. Horn to address accessibility issues.

Until the accessibility issue is resolved, the Technical Panel requested that the project continue providing status reports.

## **ENTERPRISE PROJECT - OTHER PROJECT UPDATES**

There were no other project status reports.

## **STANDARDS AND GUIDELINES - SET FOR 30-DAY COMMENT PERIOD \***

Mr. Becker stated that the State Government Council has not had the opportunity to review NITC 5-101 and NITC 5-204. To allow for their input, the comment period for these will extend until the end of January.

NITC 3-202: Land Record Information and Mapping Standard (Revised)

The GIS Council has approved the standard for the 30-day public comment period.

NITC 5-101: Enterprise Content Management System for State Agencies

This is a new standard due to the Office of the CIO's Enterprise Content Management project.

NITC 5-204: Linking a Personal Portable Computing Device to the State Email System for Data Classified as "Internal Use Only" or "Unclassified/Public"

The NITC Security Work Group developed the new standard. Mr. Becker noted that Brad Weakly, State Information Security Officer, may make changes to the "Recommendations" section of the attachment. It was recommended that the Agency Director (not a representative) sign the form. Determination of email access and sensitivity matter will be determined at the agency level. It was also recommended to use verbiage that a common user would understand. Mr. Weakly stated this will be a living document as it is being implemented.

**Mr. Langer moved to approve [NITC 3-202](#) Land Record Information and Mapping Standard (Revised), [NITC 5-101](#) Enterprise Content Management System for State Agencies, and [NITC 5-204](#) Linking a Personal Portable Computing Device to the State Email System for Data Classified as "Internal Use Only" or "Unclassified/Public" with the recommended changes for the 30-day public comment period. Ms. Horn seconded. Roll call vote: Weir-Yes, Langer-Yes, Horn-Yes, and Decker-Yes. Results: Yes-4, No-0, Abstained-0. Motion carried.**

#### **STANDARDS AND GUIDELINES REQUEST FOR WAIVER**

Department of Labor request for waiver from requirements contained in [NITC 8-301](#).

Mr. Weakly provided background information to the panel. The Department is requesting a waiver to the password requirements for access to an online service. The requirement that passwords change every 90 days is considered too restrictive for occasional public or business users and the Department is requesting these passwords expire annually. This is a potentially recurring issue. The password requirements for state employees may not be appropriate for other users. After discussion it was determined that the Security Architecture Work Group should review the password standard and provide recommendation for a revised standard to address this issue.

**Mr. Weir moved to grant the waiver to the Department of Labor for 18 months. Ms. Decker seconded. Roll call vote: Horn-Yes, Langer-Yes, Weir-Yes, and Decker-Yes,. Results: Yes-4, No-0, Abstained-0. Motion carried.**

#### **ELECTION - TECHNICAL PANEL CHAIR FOR 2011**

**Ms. Decker moved to nominate Walter Weir to serve as 2011 Chair of the Technical Panel. Mr. Langer seconded. Roll call vote: Weir-Yes, Langer-Yes, Horn-Yes, and Decker-Yes. Results: Yes-4, No-0, Abstained-0. Motion carried.**

#### **REGULAR INFORMATIONAL ITEMS AND WORK GROUP UPDATES**

(as needed)

Accessibility of Information Technology Work Group, Christy Horn. The work group has not met due to Ms. Horn's efforts to address accessibility issues with the NeSIS and the distance education initiatives.

Learning Management System Standards Work Group, Kirk Langer. No report.

Security Architecture Work Group, Brad Weakly. Governor Heineman signed a proclamation on October 7<sup>th</sup> for National Cyber Security Month. The Office of the CIO sent out Cyber Security awareness publications to over 130 state entities as well as shared this information on the OCIO website. He has received a lot of positive feedback. A presentation on cyber security was provided to the State Retirement Systems Office.

#### **OTHER BUSINESS**

Mr. Weir distributed information about [GPN2011: The Great Plains Network Annual Meeting](#) to be held June 1-3, 2011 in Kansas City, Missouri.

**ADJOURN**

The next meeting of the NITC Technical Panel will be held in January.

**With no further business, Ms. Decker moved to adjourn. Mr. Langer seconded. All were in favor. Motion carried.**

**NEBRASKA INFORMATION TECHNOLOGY COMMISSION**  
**ENTERPRISE PROJECT STATUS DASHBOARD – AS OF FEBRUARY, 2011**

Access Nebraska	Project Constraints	February	November	October	Comments
	Overall Status				<p>No update for February.</p> <p>Schedule: Remains in “Yellow” status to reflect the fact that the Functional Universal Case Management System will not be ready for implementation at the same time the staff move into the first Customer Service Center in Lincoln. Other schedule issues include: Implementation of the Telecommunications System particularly the VRU component running behind schedule.</p> <p>Budget: The project budget remains on track. The budget expenditures have followed the allocated amounts. The expenditures are occurring at a later time then originally projected.</p>
	Schedule				
	Budget				
	Scope				

Student Info System	Project Constraints	February	November	October	Comments
	Overall Status				<p>Close out presentation was provided in December.</p> <p>ADA Compliance updates are only outstanding items.</p> <p>Pending NITC approval, no further reporting required on this project.</p>
	Schedule				
	Budget				
	Scope				

Talent Mgt System	Project Constraints	February	November	October	Comments
	Overall Status				<p>Talent Management has added Benefits Administration (open enrollment, life events / status changes and new hire enrollment) functionality. Planned roll-out of Benefits Open Enrollment will be April, 2012.</p> <p>LMS is being rolled out to agencies in phases scheduled through the end of this year and the first quarter of 2011. Administrative Services, Workers Compensation, DEQ, Roads, Corrections, and Revenue are now live. Five more agencies are ready to go live.</p> <p>Statewide LMS and ATS teams remain active and meet on a biweekly basis. Next task for ATS Team is to review and implement a statewide background check process utilizing an automated solution developed by the Nebraska State Patrol.</p> <p>Statewide Defensive Driving online course has been selected, implemented and being utilized at a reduced rate and time commitment. The rate for a single class was \$14.75 and the current cost is \$12.00. The time commitment went from 4 hours per employee to one hour online per employee.</p>
	Schedule				
	Budget				
	Scope				

Network Ne Education	Project Constraints	February	November	October	Comments
	Overall Status				<p>Other than the reluctance of the southeast quadrant to join the statewide network the project is proceeding about as well as can be expected. High points for 2010: Internet Access cost for K-12 has decreased by 60% over 2009-10 amounts with an all-time low of \$6.10/Mbps; at least three new independent colleges joined in October 2010; Network Nebraska-Education Advisory Group is embracing their advisory role to the CIO; Education Council's Network Nebraska Marketing Survey is finishing their 2011 Report and that is providing very good data upon which to make decisions and set strategic directions. Neb. Rev. Stat. 86-520.01 Detailed Financial Reporting was completed on November 15, 2010. Neb. Rev. Stat. 86-5,100 Equipment Notification website will be finished before 2/9/2011.</p> <p>The Legislative deadline of the CIO providing access to every public education entity "no later than July 1, 2012" is rapidly approaching, which explains the yellow light 'Schedule'. There are approximately 60 K-12 entities that have chosen not to join Network Nebraska but will be re-invited to join for July 1, 2011. Otherwise, 14 public/private institutions have joined and 2 more are imminent. "Scope" 'yellow' because the financial ability to deploy value-added services is constrained by the lack of growth in the membership and Participation Fee revenue.</p>
	Schedule				
	Budget				
	Scope				

Public Safety Wireless	Project Constraints	February	November	October	Comments
	Overall Status				<p>The OCIO-NPPD interlocal agreement establishes a System User Group to address user agency needs, and a System Operating Group to address operations and management. Ongoing system support and lifecycle includes multiple vendors in partnership with the state, in addition to partnerships with local and federal agencies.</p> <p>In process to hire final position.</p>
	Schedule				
	Budget				
	Scope				

Fusion Center	Project Constraints	February	November	October	Comments
	Overall Status				<p>The number of users defined in the original RFP and signed contract will be inadequate to fully implement the software solution once completed. Minor impact to the project schedule. Reason for change to yellow.</p> <p>Received contract extension notification on 12/30/2010.</p>
	Schedule				
	Budget				
	Scope				

Online Assessment

Project Constraints	February	November	October	Comments
Overall Status				<p>Nebraska DOE has contracted with Data Recognition Corporation (DRC) to continue the development of the assessment system including management, development, delivery, administration, scanning/imaging, scoring, analysis, reporting, and standard setting for the online and pencil/paper reading and mathematics tests for July 1, 2010 through June 30, 2011. Field testing of science items for grades 5, 8, and 11 will be completed during the 3<sup>rd</sup> contract year, March 28 through May 6. Student data will be transferred from the Nebraska Student Staff Record System (NSSRS) to DRC's student data assessment system. The online subcontractor Computerized Assessments &amp; Learning (CAL) for the online components of the assessment system will upload the student data from DRC. Schools will install CAL's software on local computers and software updates will be automatically uploaded when students log onto the assessment system. The student responses are cached on the local computer and sent to CAL. Each district has used CAL's school capacity process to evaluate online requirements for NeSA testing. The student responses for secure online assessments will be collected by CAL and transferred to DRC for analysis and reporting. During spring 2011, NDE is estimating that over 140,000 students will participate in the Reading and Mathematics operational testing. The NeSA reading/math test window is from March 28 through May 6, 2011. Test administrators will be able to monitor testing during the test window and review test results immediately after test administration (raw scores only). DRC's comprehensive corrections system will permit NDE to correct student records for duplicates, incorrect school assignment, etc during the month of June. Complete reporting of student results to districts, schools, and parents will be completed in August 2011.</p> <p>Nebraska DOE has also contracted with DRC to transition the previous statewide writing assessment system administered by ESU #3 into an online and pencil/paper assessment system. The management, development, delivery, administration, scanning/imaging, scoring, analysis, reporting, and standard setting for the writing assessments are included in the project for October 1, 2010 through June 30, 2011. Student data for grade 4, 8, and 11 will be transferred from the Nebraska Student Staff Record System (NSSRS) to DRC's student data assessment system. Grade 4 and 8 students will participate in the 2011 writing assessment with the paper/pencil mode just like previous years. The online subcontractor Computerized Assessments &amp; Learning (CAL) will upload the grade 11 student data from DRC to pilot the online writing system.</p>
Schedule				
Budget				
Scope				



Interoperability Project	Project Constraints	February	November	October	Comments
	Overall Status				The project is not on schedule. When we began the grant funded portion of the project needed to be completed in September of 2010. We have received an extension until September 2011 and plan on asking for another and final extension of the PSIC funds until September 2012. This wasn't a huge surprise, just disappointing that it has progressed so slowly.
	Schedule				
	Budget				The project is within budget. We have been given a certain amount of dollars to complete the project and can't spend anymore. Although additional funding from future year Homeland Security Grants if they continue may be utilized to complete the project. It is difficult to place a cost on the project as it is dependent upon the existence of adequate infrastructure which is an unknown until the "ring" designs are finalized and structure and other analyses are complete.  Project is within scope. A process is identified by the feds to seek a change within the scope of the project.
	Scope				

MMIS	Project Constraints	February	November	October	Comments
	Overall Status				Gray Status Color Indicates no report for the reporting period.  Project On Hold until renewed
	Schedule				
	Budget				
	Scope				

Content Management	Project Constraints	February	November	October	Comments
	Overall Status				Enterprise Content Management (ECM) is the combination of strategies, methods and tools used to capture, manage, store, preserve, and deliver content related to an organization's functions. Content can include documents, email, images, video, audio, and any information in digital format. The ECM tool being purchased by the State also allows electronic forms and workflow to streamline processes.
	Schedule				
	Budget				Currently working on Active Directory Security setup.
	Scope				Overall, project is on time and within budget.

**Color Legend**

	Red	<p><b>Project has significant risk to baseline cost, schedule, or project deliverables. Current status requires immediate escalation and management involvement.</b></p> <p>"Probable that item will <b>NOT</b> meet dates with acceptable quality without changes to schedule, resources, and/or scope".</p>
	Yellow	<p><b>Project has a current or potential risk to baseline cost, schedule, or project deliverables. Project Manager will manage risks based on risk mitigation planning.</b></p> <p>"Good probability item will meet dates and acceptable quality. Schedule, resource, or scope changes may be needed".</p>
	Green	<p><b>Project has no significant risk to baseline cost, schedule, or project deliverables.</b></p> <p>"Strong probability project will meet dates and acceptable quality".</p>



# Nebraska Information Technology Commission

## STANDARDS AND GUIDELINES

### Draft Revision, 12-1-10

## Land Record Information and Mapping Standards

Category	<b>Data and Information Architecture</b>
Title	<b>Land Record Information and Mapping Standards</b>
Number	<b>3-202</b>

Applicability	<input checked="" type="checkbox"/> <b>State Government Agencies</b> <input checked="" type="checkbox"/> All ..... <b>See each section</b> <input checked="" type="checkbox"/> Excluding ..... <b>See Section 4.1</b> <input checked="" type="checkbox"/> <b>State Funded Entities</b> - All entities receiving state funding for matters covered by this document ..... <b>See each section</b> <input checked="" type="checkbox"/> <b>Other: Public Entities</b> - Other public entities developing or acquiring geospatial data not supported by state funding ..... <b>See each section</b>  <b>Definitions:</b> <b>Standard</b> - Adherence is required. Certain exceptions and conditions may appear in this document, all other deviations from the standard require prior approval of <u>NITC Technical Panel</u> . <b>Guideline</b> - Adherence is voluntary.
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Status	<input type="checkbox"/> Adopted <input checked="" type="checkbox"/> <b>Draft</b> <input type="checkbox"/> Other: _____
Dates	Date: <u>recommended by the GIS Council on 12-1-10</u> Date Adopted by NITC: January 27, 2006 Other:

Prepared by: The Nebraska GIS Steering Committee and endorsed and referred to the Technical Panel of the Nebraska Information Technology Commission for NITC consideration. Draft revision prepared by GIS Council Working Group, and recommended for adoption by the NITC GIS Council on 12-1-10  
Authority: Neb. Rev. Stat. § 86-572(2c), 86-516(6)  
<http://www.nitc.state.ne.us/standards/>

## 1.0 Standard

These standards/guidelines are primarily focused on those public entities responsible for maintaining property parcel maps for their particular jurisdiction. The last line following each standard or guideline refers to the type(s) of agency or entity to which that standard/guideline applies and whether it is a standard (adherence required) or guideline (adherence voluntary) for each type of entity.

**1.1 Datum.** Local government multipurpose GIS/LIS (Geographic Information System/Land Information System) and their associated geospatial data layers should be based on the North American Datum (NAD) 83 and the North American Vertical Datum (NAVD) 88. Any existing systems developed based on other datums should consider conversion to these datum.

State Agencies: Standard      State Funded Entities: Standard      Other: Standard

**1.2 Projection.** The Nebraska ([State](#)) Plane Coordinate System, NAD 83, should be used as the primary map projection system for the recording of positions in local land-data systems in Nebraska. Selection of any other projection should be done reluctantly and only after most careful consideration. The plane coordinate values for a point on the earth's surface may be expressed in either meters or feet.

State Agencies: Standard      State Funded Entities: Standard      Other: Standard

**1.3 Geodetic Control.** GIS/LIS systems developed with the goal of providing a multipurpose cadastre for local government use should be referenced to a local geodetic reference framework that is properly connected to the National Spatial Reference System (NSRS).

State Agencies: Standard      State Funded Entities: Standard      Other: Standard

### 1.4 Public Land Survey System Control.

**1.4.1 PLSS Geodetic Framework.** For all land in Nebraska that is subdivided according to the Public Land Survey System (PLSS), the geodetic reference framework for the cadastre should be the section corners of the PLSS for each section.

State Agencies: Standard      State Funded Entities: Standard      Other: Standard

**1.4.2 Locate, Monument, and GPS Primary Corners.** At a minimum, local government entities developing a geospatial land information system should initially invest in a precision Global Positioning System (GPS) survey to locate, re-monument as necessary, and obtain the geographic coordinates of the major boundary defining corners that legally define the boundaries of their county jurisdiction(s). These precision GPS survey coordinates for the boundary defining corners should be collected and integrated as framework data into the land information system. This effort should be coordinated with officials from the adjacent county(ies) to ensure agreement on the location of the shared corners.

State Agencies: Standard      State Funded Entities: Standard      Other: Guideline

**1.4.3 Progressive Monumentation.** In addition, each county (or municipality) that is planning to develop a GIS/LIS-based cadastre program should also consider

initiating a progressive program to locate and/or re-monument, as necessary, and collect geographic coordinates on other PLSS corners according to the legally established procedures and properly connect them to the National Spatial Reference System to obtain geodetic coordinates.

State Agencies: **Guideline**      State Funded Entities: **Guideline**      Other: **Guideline**

**1.5 PLSS Base Map.** Local governments considering the development of a multipurpose GIS, should consult with the Nebraska State Surveyor’s Office to locate and access the best available data on the Public Land Survey System (PLSS) for their geographic area. To assist the State Surveyors Office in maintaining a repository of the best available PLSS data, local governments participating in the Nebraska Land Information System Program should share any enhanced PLSS data, for their geographic area, with the State Surveyors Office so that it might be integrated into the PLSS repository database.

State Agencies: **Standard**      State Funded Entities: **Standard**      Other: **Standard**

**1.6 Ortho-base (Aerial Layer) or Base Maps.** Both a Public Land Survey System base map and an orthophoto (surface features) imagery base map should be used to provide the geospatial reference framework upon which a local government multipurpose land information system is developed. Both base maps should be tied to the National Spatial Reference System and have a level of spatial accuracy appropriate to the range of applications planned for a given area. Jurisdictions should acquire new imagery of urban areas at least every five years and of rural areas at least every ten years. Jurisdictions experiencing rapid or slow growth may need to adjust this timetable (IAAO 2009).

State Agencies: **Standard**      State Funded Entities: **Standard**      Other: **Standard**

**1.7 Map Scale and Spatial Accuracy.**

**1.7.1 Minimum Horizontal Accuracy Standard.** Public entities developing a GIS/LIS program should conduct data collection and development in a manner to achieve at least the minimum level of horizontal spatial accuracy consistent with the National Horizontal Map Accuracy Standards corresponding to a 1:12,000 (1"= 1,000') scale map (90% of the “well defined” horizontal locations must be within ±33.3 ft. of their real world location).

State Agencies: **Standard**      State Funded Entities: **Standard**      Other: **Standard**

**1.7.2 Additional Accuracy Considerations.** Beyond this minimum horizontal map accuracy, public entities are encouraged to consider the following recommended map scales and their corresponding National Horizontal Map Accuracy Standards in determining the positional accuracy needed for base maps in the development of a local government GIS/LIS:

<u>Relative Size of Property Parcels</u>	<u>Map Scale</u>		<u>Nat'l Horizontal Map Accuracy Std.</u>	<u>Equivalent Metric Scale</u>
Urban areas	1:600	(1" = 50')	±1.7 ft.	1:500
	1:1,200	(1" = 100')	±3.3 ft.	1:1,000
Large urban & suburban	1:2,400	(1" = 200')	±6.7 ft.	1:2,500
Rural areas	1:4,800	(1" = 400')	±13.3 ft.	1:5,000
	1:9,600	(1" = 800')	±26.7 ft.	1:10,000

Suggested draft revision of existing Nebraska Information Technology Commission Standard and Guidelines

State Agencies: **Guideline**State Funded Entities: **Guideline**Other: **Guideline**

**1.8 Legal Lot and Parcel Layers.** ~~Two graphic data layers~~ Data on two interrelated types of land subdivision (i.e. legally subdivided lots and ownership tracts) are necessary to provide the foundation for a wide variety of local government GIS/LIS applications that involve land subdivision and/or ownership.

a). The legal lot feature or layer ~~consisting~~ consists of legal land subdivisions. These are aliquot portions of the PLSS, filed subdivision plats and irregular tracts defined by filed deeds.

b). The parcel feature or layer ~~that~~ defines ownership tracts of land. These tracts may group multiple legal lots into one taxable account and that typically represents the boundaries of a landowner's property. These data features or layers include locational coordinates for points representing property corners, lines between property corners representing property boundaries and closed polygons representing the property area.

State Agencies: **Standard**State Funded Entities: **Standard**Other: **Standard**

### 1.9 Parcel Identifiers.

a). Each county/region should adopt a system of unique, permanent feature identifiers (PID) that provide the link between each graphic land ownership parcel polygon and the attribute information (ownership, size, situs address, value, etc.) related to that specific land ownership property parcel.

b). A county/region PID system must be designed in a manner such that a unique, statewide PID can be defined and maintained for each property parcel by using the county FIPS code (Federal Information Processing Standards Publications) as a prefix to the county/region's PID system.

c). To maintain this unique one-to-one association between a specific property parcel and its related attribution information, new PIDs should be assigned whenever a property parcel is altered by either splitting it into two or more parcels or by combining two or more parcels to form a new parcel. The previous PIDs should not be used for these new modified parcels, but the historical PID associations should be maintained through a parent/child PID reference table.

State Agencies: **Standard**State Funded Entities: **Standard**Other: **Standard**

**1.10 Spatial Data Format.** A broad range of state and regional applications require property parcel information. Many of these applications require the combining of data across jurisdictional boundaries. To facilitate these applications, the property parcel spatial (graphic) data should be either maintained in a manner that allows it to be readily integrated ~~in a common geographic~~ into a spatial relational database data format (i.e., shapefile) or be capable of being exported into a common geographic data format (i.e., shapefile), while including the parcel identifiers.

State Agencies: **Standard**State Funded Entities: **Standard**Other: **Guideline**

**1.11 Metadata.** All geospatial land record databases, and their associated attribute databases should be documented with Federal Geographic Data Committee (FGDC) compliant metadata outlining how the data was derived, attribute field definitions and values, map projections, appropriate map scale, contact information, access and use restrictions, etc.

State Agencies: **Standard**

State Funded Entities: **Standard**

Other: **Standard**

**1.11.1 NebraskaMAP Metadata.** The NebraskaMAP (<http://NebraskaMAP.gov>) is a state sponsored GIS web-based portal for finding and accessing a wide variety of GIS/geospatial data related to the geographic area of Nebraska. Many of the NebraskaMAP functions required metadata. All developers of Nebraska-related GIS data are encouraged to use the site to either upload existing metadata and/or use the online tools available on the site to create metadata for your GIS/geospatial land record information and mapping. Before metadata can be either created or uploaded on the site, a brief user registration is necessary.

State Agencies: **Guideline**

State Funded Entities: **Guideline**

Other: **Guideline**

**1.12 Attribute Data.** To provide the foundation necessary for a wide variety of local government applications, non-graphic, attribute data should be organized within the GIS/LIS, which describes individual property parcels relative to their basic parcel characteristics, tenure, value, history, buildings and units within the parcel, and tax status.

In most cases, much of this attribute data will already exist in separate databases within a variety of local agencies and should be linked-referenced to the graphic property parcel via the unique PID. To meet a range of state and regional applications that require property parcel information, the following types of property parcel data should be maintained and be available in a manner that allows it to be harvested, translated, and integrated into a statewide property parcel attribute dataset. These attribute values may be maintained in one or more separate relational databases that are referenced by a unique PID and not directly integrated into a GIS.

- PID# ..... Parcel identifier (county FIPS code plus local government PID)
- Situs Address..... Address of parcel (may be multiple fields)
- Owner Address ..... Address of property owner (may be multiple fields)
- Township ..... Township #
- Section ..... Section #
- Range ..... Range #
- Range Direction ..... East or West
- Legal Description ..... Narrative legal description of parcel
- Assessed Value ..... Total assessed value of property (land and improvements)
- Land Value..... Assessed value of land
- Area (Deeded) ..... Area of parcel according to the deed
- Property Class ..... (Res, Ag, Com, Rec., Ind.)
- Property Sub-class ..... i.e., Ag (Dryland, Irrigated, Grassland/Pasture, Waste)
- Ownership type..... Federal, State, County, Private, Tribal, Exempt, Other and Unknown
- Tax District..... County ID plus Tax Dist. #

School District .....	State number definition
Landuse .....	Actual landuse with NPAT defined general categories
Property Parcel Type...	NPAT defined categories: <a href="#">(i.e., Single Family, Multi-Family, Commercial, Industrial, Agriculture, Recreational, Mineral Interest-Nonproducing, Mineral Interest-Producing, State Assessed, or Exempt)</a>
Status .....	<a href="#">NPAT defined categories: (Vacant, Improved or Improved only) (Improved, Unimproved, or IOLL)</a>
Location .....	<a href="#">NPAT defined:</a> (Urban, Sub-urban, Rural) <a href="#">(NPAT defined)</a>
City Size.....	1 <sup>st</sup> class, 2 <sup>nd</sup> class, primary, metro, or village
Source Document.....	Sales/transfer reference or document (book & page <a href="#">&amp; date</a> )
Sales Date.....	Most recent sales/transfer date
Sales Value.....	Most recent sales value
<u>State Agencies:</u>	<b>Standard</b>
<u>State Funded Entities:</u>	<b>Standard</b>
<u>Other:</u>	<b>Standard</b>

## 2.0 Purpose and Objectives

The purpose of these standards and guidelines is to help realize the maximum long-term return on and overall utility of the public's investment in the modernization of how Nebraska's land records are maintained and distributed.

### 2.1 Background

Land records and land ownership records are public records that are used by wide cross-section of our society and its institutions. Ready access to current and accurate land records is critical to our state's overall economy and the efficient functioning of many of its public and private institutions.

Historically land records have been maintained on paper records and paper maps. This made it very difficult and costly to update and keep current records and maps in areas where there was significant turnover in property ownership. Paper records and maps also made it difficult to share land record information outside of the physical office where they were maintained. Paper records and maps also made it difficult to conduct analyses of broader land ownership and land valuation patterns. Computerization in general, and GIS/geospatial technologies in particular, have revolutionized how land and land ownership records can be maintained, analyzed, shared, and distributed.

Modern computerized land records and maps make it relatively easy to update and keep current land records and maps. Computerization and GIS/geospatial technologies now routinely enable easy, reliable access to land records and maps via the Internet to a wide variety of users. Land records in computerized relational databases and GIS parcel maps have provided a wide array of new information management tools that can be used to integrate land records with other data and analyze and display land ownership, land valuation and other broader land-related patterns. Among other uses, these tools help ensure that all property is on the tax rolls and that the property is taxed equally.

Modern computerized land records and maps can provide a wide array of potential benefits to a wide array of users. However, to realize many of these benefits, it is important that when these databases and maps are originally developed they follow a minimal set of standards and guidelines that support this potential broad array of applications and benefits. In many instances, it is not this broader array of potential uses that is the immediate stimulus, which causes a local or state agency to undertake a modernization of

its land records and maps. Therefore, these standards and guidelines serve the function of raising the awareness of these potential future applications and the related need to incorporate minimal standards beyond those needed for immediate applications.

These standards and guidelines are intended to help ensure that modernized land records are developed on a solid technical foundation. A foundation, which will enable both the original developing agency, and other interested entities, to build on this initial investment and maintain and enhance the data and enable it to be utilized for multi-purposes by multiple users. These standards and guidelines are also intended to facilitate partnerships between local, state, and federal entities to support the development and maintenance of modernized land records

## **2.2 Objectives**

These standards and guidelines to guide the modernization of land records in Nebraska have the following objectives:

- 2.2.1. Provide guidance to state and local officials as they work, either in-house or with private contractors, to develop and/or acquire computerized, geospatial data related to land records and maps and thereby increase the likelihood that the data acquired and/or developed will be suitable for the range of intended applications and likely future applications.
- 2.2.2. Improve public policy development and implementation by helping to make land records more current and readily accessible and by making available to land record management applications the wide range of analytical tools available through GIS/geospatial technology.
- 2.2.3. Enhance coordination and program management across jurisdictional boundaries by insuring that modernized land records and maps can be readily integrated across jurisdictional boundaries for regional applications (e.g., school districts, NRDs, emergency response, etc.) or statewide applications.
- 2.2.4. Save public resources by facilitating the sharing of computerized land records among public agencies or sub-divisions of agencies by incorporating data standards and following guidelines which will make it more likely that the computerized land records developed by one entity will also be suitable to serve the multiple needs of other entities and thereby avoid the costly duplication of developing and maintaining similar land records.
- 2.2.5. Make land records and land ownership maps more readily accessible to the wide range of potential users
- 2.2.6. Facilitate harmonious, trans-agency public policy decision-making and implementation by enabling multiple agencies and levels of government to access and appropriately use common geospatial datasets and thereby make it more likely that intersecting public policy decisions, across levels of government, will be based on the same information.
- 2.2.7. Lay the foundation for facilitating intergovernmental partnership to the modernization of land records by defining standards and guidelines that increase the likelihood that computerized land records will meet the needs of multiple users.



## 3.0 Definitions

### 3.1 Attribute Data

Properties and characteristics of property parcel or other spatial data entities.

### 3.2 Datum

A Geodetic Reference System is the true technical name for a datum. A datum is a combination of an ellipsoid, which specifies the size and shape of the earth, and a base point from which the latitude and longitude of all other points are referenced.

### 3.3 Entity

Any object about which an organization chooses to collect data.

### 3.4 Geodetic Control

A set of surveyed monuments used to define a spatial reference system and used to register map sheets and transform coordinates for a particular project.

### 3.5 Geographic Information System (GIS)

A system of computer hardware, software, and procedures designed to support the compiling, storing, retrieving, analyzing, and display of spatially referenced data for addressing planning and management problems. In addition to these technical components, a complete GIS must also include a focus on people, organizations, and standards.

### 3.6 Geospatial Data

A term used to describe a class of data that has a geographic or spatial nature. The data will usually include locational information (latitude/longitude or other mapping coordinates) for at least some of the features within the database/dataset.

### 3.7 Global Positioning System (GPS)

GPS is a method for identifying locations on earth using triangulation calculations of satellite positions. Originally created by the United States Military, it has since found numerous commercial applications.

### 3.8 Land Information System (LIS)

A special type of GIS that manages and analyzes data related to land ownership (e.g., tax parcels, urban infrastructure, property assessment). A GIS used for municipal or county level applications is typically structured as an LIS.

### 3.9 Map Scale

The scale of a map is the ratio between a distance on the map and the corresponding distance on the earth, with the distance on the map typically expressed as 1. Thus, a scale of 1:100,000 means 1 inch on the map equals 100,000 inches (approximately 1.6 miles) on the earth. Large scale maps depict a small area and show more detail. Small scale maps depict a large area and show less detail.

### 3.10 Metadata

Data describing a GIS database or data set including, but not limited to, a description of a data transfer medium-, format, and contents, source lineage data, and any other applicable data processing algorithms or procedures.

### 3.11 Monumentation of PLSS Corners

Monumentation in surveying refers to the practice of marking known horizontal and vertical control points with permanent structures such as concrete pedestals and metal plaques.

Once surveyed and marked, these monuments can be used for further surveying and for the alignment of land-parcel boundaries and infrastructure.

### **3.12 National Spatial Reference System (NSRS)**

A consistent national coordinate system that defines latitude, longitude, height, scale, gravity, and orientation throughout the Nation, and how these values change with time. Consequently, it ties spatial data to geo-referenced positions.

### **3.13 Nebraska Plane Coordinate System**

Nebraska Plane Coordinate System means the system of plane coordinates for designating the geographic position of points on the surface of the earth, within the State of Nebraska, which have been established by the National Ocean Service/National Geodetic Survey, or its successors. The Nebraska Plane Coordinate System is a Lambert conformal conic projection of the North American Datum of 1983, having standard parallels at north latitudes 40 degrees 00 minutes and 43 degrees 00 minutes along which parallels the scale shall be exact. The origin of coordinates is at the intersection of the meridian 100 degrees 00 minutes west of Greenwich and the parallel 39 degrees 50 minutes north latitude. This origin is given the coordinates. N = 0 meters and E = 500,000 meters. (State of Nebraska Statutes, Section 76-2502)

### **3.14 Orthophoto**

An aerial photo that has been corrected to eliminate the effects of camera tilt and relief displacement. The ground geometry is recreated as it would appear from directly above each and every point. Digital orthophotos can be created by scanning the original photograph and applying a process called differential rectification to each pixel in the image. In creating digital orthophotos, it is also possible to remove the effects of tangential displacement.

### **3.15 Parcel Identifier (PID)**

A unique number identifying a specific property on the assessment and tax rolls and used as a cross reference between graphic/mapping data and tabular attribute data.

### **3.16 Projection**

A system to portray all or part of the earth, which is an irregular sphere, on a planar, or flat surface.

### **3.17 Public Land Survey System (PLSS)**

The Public Land Survey System (PLSS) is a way of subdividing and describing land in the United States. All lands in the public domain are subject to subdivision by this rectangular system of surveys (townships, ranges, sections, quarter-sections, etc.), which is regulated by the U.S. Department of the Interior, Bureau of Land Management.

### **3.18 Shapefile**

A Shapefile is an ESRI digital vector (non-topological) storage format for storing geometric location and associated attribute information that can be generated by a wide variety of GIS software packages.

### **3.19 Spatial Accuracy**

The accuracy of a map in representing the geographic location of an object relative to its true location on the surface of the Earth based on geographic coordinates.

## **4.0 Applicability**

### **4.1 State Government Agencies**

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[Suggested draft revision of existing](#) Nebraska Information Technology Commission  
Standard and Guidelines

State agencies that have the primary responsibility for maintaining land ownership records and property parcel maps for a particular jurisdiction(s) or geographic area (e.g. Nebraska Dept. of Property Assessment and Taxation for counties for which it has assumed the primary assessment role) are required to comply with those sub-sections identified as a “Standard” for “State Agencies” in section 1. Those state agencies with oversight responsibilities in this area are required to ensure that their oversight guidelines, rules, and regulations are consistent with these standards.

#### **4.2 State Funded Entities**

Entities that are not State agencies but receive State funding, directly or indirectly, for property parcel mapping and/or property tax assessment and have the primary responsibility for maintaining property parcel maps for a particular jurisdiction or geographic area are required to comply with those sub-sections identified as a “Standard” for “State Funded Entities” in section 1.

#### **4.3 Other**

Other entities, such as local government agencies (e.g. County Assessor, County Register of Deeds, municipalities) that have the primary responsibility for developing and maintaining land ownership records and property parcel maps are required to comply with those sub-sections identified as a “Standard” for “Other” in Section 1.

#### **4.4 ExemptionWaivers**

~~Exemptions~~ Waivers to these standards may be granted by the NITC Technical Panel upon request by an agency. See the NITC Waiver Policy 1-103 for details (<http://nitc.nebraska.gov/standards/1-103.html>).

##### **4.4.1 Exemption Process**

~~Any agency may request an exemption from these standards by submitting a “Request for Exemption” to the NITC Technical Panel. Requests should state the reason for the exemption. Reasons for an exemption include, but are not limited to: statutory exclusion; federal government requirements; or financial hardship. Requests may be submitted to the Office of the CIO via e-mail or letter (Office of the CIO, 521 S 14th Street, Suite 301, Lincoln, NE 68508). The NITC Technical Panel will consider the request and grant or deny the exemption. A denial of an exemption by the NITC Technical Panel may be appealed to the NITC.~~

### **5.0 Responsibility**

#### **5.1 NITC**

The NITC shall be responsible for adopting minimum technical standards, guidelines, and architectures upon recommendation by the technical panel. (N.R.S. 86-516 §6)

#### **5.2 State Agencies**

The Nebraska Department of Property Assessment and Taxation will be responsible for ensuring that its rules and regulations relative to land ownership records and property parcel (tax) mapping include those subsections in Section 1 that are identified as a “Standard” for “Other” and are consistent overall with those standards.

#### **5.3. Granting Agencies and Entities**

State granting or fund disbursement entities or agencies will be responsible for ensuring that these standards are included in requirements and regulations related to fund disbursements as they relate to land (property parcel) records or property parcel mapping.

## 5.4 Other

Local government agencies that have the primary responsibility for land ownership records and property parcel mapping will be responsible for ensuring that those sub-sections defined for “Other” as a “Standard” in Section 1 will be incorporated in land record modernization and geospatial data development efforts and contracts.

## 6.0 Related Documents

### 6.1 ~~Federal Geographic Data Committee (FGDC)~~ Cadastral Data Content Standards for the National Spatial Data Infrastructure

<http://www.nationalcad.org/data/documents/CADSTAND.v.1.4.pdf>  
[http://www.fgdc.gov/standards/status/sub3\\_5.html](http://www.fgdc.gov/standards/status/sub3_5.html)

### 6.2 Nebraska Guidebook for Local Government Multipurpose Land Information Systems. <http://nitc.nebraska.gov/gisc/docs/landrecords/guidebook.html> [http://www.calmit.unl.edu/gis/LIS\\_Stds\\_Intro.html](http://www.calmit.unl.edu/gis/LIS_Stds_Intro.html)

### 6.3 Federal Geographic Data Committee Content Standard for Digital Geospatial Metadata Workbook (For use with FGDC-STD-001-1998) Version 2.0

[http://www.fgdc.gov/metadata/documents/workbook\\_0501\\_bmk.pdf](http://www.fgdc.gov/metadata/documents/workbook_0501_bmk.pdf)  
[http://www.fgdc.gov/publications/documents/metadata/workbook\\_0501\\_bmk.pdf](http://www.fgdc.gov/publications/documents/metadata/workbook_0501_bmk.pdf)

## NITC 5-101 (DRAFT)

Technical Panel  
of the  
Nebraska Information Technology Commission

### Standards and Guidelines

**Draft Document**  
**30-Day Comment Period**

**Title: Enterprise Content Management System for State Agencies**

#### Notes to Readers:

1. The following document is a draft document under review by the Technical Panel of the Nebraska Information Technology Commission (NITC). This document is posted at <http://nitc.ne.gov/standards/comment/>.
2. If you have comments on this document, you can submit them by email to [rick.becker@nebraska.gov](mailto:rick.becker@nebraska.gov), or call 402-471-7984 for more information on submitting comments.
3. The comment period for this document ends on January 31, 2011.
4. The Technical Panel will consider this document and any comments received at a public meeting following the comment period, currently scheduled for February 8, 2011. Information about this meeting will be posted on the NITC website at <http://nitc.ne.gov/>.

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**State of Nebraska**  
**Nebraska Information Technology Commission**  
**Standards and Guidelines**

#### NITC 5-101 (Draft)

Title	Enterprise Content Management System for State Agencies
Category	Groupware Architecture
Applicability	Standard for all State government agencies, excluding higher education

#### 1. Standard

State Agencies acquiring software to manage multiple types of content from multiple sources or creating workflow around that content, shall as described in Section 2 use the “Enterprise Content Management System” (ECM) that is maintained and hosted by the Office of Chief Information Officer (OCIO).

Agencies must consider using the ECM’s E-Forms software to create, submit and process forms based information for new solutions. Agencies must justify using other technologies and adhere to the exceptions as described in Section 4.

#### 2. Scope of managing content and creating workflow includes the following:

- Capturing paper documents through the use of scanners and storing them in electronic form;
- Capturing all type of content (audio, video, e-faxes, emails, MS Office documents, etc) and storing them in electronic form;
- Electronic searching and retrieval of captured content;

- Automating records retention and archiving;
- Automating business processes through workflow;
- Reducing and/or eliminating paper document storage;
- Creation, submission and processing of Forms based information (E-Forms).

Document management systems fall under the same definition as content management systems.

### 3. Purpose

The purpose of this standard is to provide State government agencies a single technical solution for:

- Capturing all types of content and storing content electronically;
- Converting and minimizing the number of paper documents the State maintains;
- Facilitate searching and retrieval of electronic documents;
- Retain and dispose of electronic documents based on established document retention policies;
- Improve efficiency and accuracy of exchanging information from State Agency to State Agency, State government-to-external business partners and external business partners to State government and through automated workflow;
- Unify document management in a single system to take advantage of economies of scale.

### 4. Exception

This standard does not apply to content management systems already in use by an Agency, unless:

- An agency intends to buy significant upgrades;
- An agency intends to buy a significant amount of new modules; or
- An agency intends to do a significant amount of custom development in their existing document/content management system.

For guidance on these points, contact the OCIO.

### 5. Definitions

**5.1 Documents** – The State currently utilizes a great deal of paper-based documents. These documents are generated internally from both manual and automated processes. Paper documents also come from external businesses and citizens. Additionally, each paper document is read by a person to determine its purpose, what information it contains, what it is associated with and what should be done with it.

Indexing is a process of extracting the key content of the document and storing that information with the electronic version of the document. The purpose of the index information is to facilitate searching and retrieval of the document and facilitate automating processes using workflow in an agency. The index information can also be used for securing the document as well as to associate multiple documents together.

The ECM will consume paper documents by either using scanners and/or electronic document uploads. The documents can be indexed by automated means using Optical Character Recognition (OCR), Intelligent Character Recognition (ICR) and/or bar codes. The ECM facilitates both automated and manual indexing.

**5.2 Processes (Workflow)** – For those paper documents that are processed manually, (i.e. from one desk to another, one agency to another, and are dependent on individual organizational skill sets to insure documents are not lost, processed timely, processed accurately and filed correctly) can be greatly improved with automated workflow. Even automated processes that were previous built with little or no integration to other processes can be improved and enhanced as well.

The ECM supplies a framework to allow agencies to easily create flexible automated workflows that can utilize documents or work as independent processes. These automated workflows readily integrate with existing processes.

**5.3 Process Monitoring** – Managers needing feedback to determine if processes are

moving, where the bottle necks are in the processes, how to reallocate work and how best to resolve process problems, can be greatly improved with automated workflow monitoring.

The ECM includes tools (business application monitoring (BAM)) to facilitate monitoring processes. Managers can set up dashboards that give real-time views into what is happening in work queues, provide information to reallocate workloads, supply information about personnel performance/activity and easy access to audit activity.

**5.4 Physical Document Storage** – Physically storing paper documents can occupy large areas of costly office and warehouse space. Finding documents in these storage facilities is labor-intensive and can take hours to days. Stored paper documents are also vulnerable to natural disasters, theft, and water and fire damage.

The ECM can greatly reduce the need to store paper. When a document is scanned into the ECM, an exact “picture” of the paper document is taken. The efficiencies of having documents available immediately can greatly reduce costs and improve efficiencies for staff spending time retrieving the physical documents, delays in finding the physical documents that could impact the customers and clients, floor space, cabinets, transportation and security. The ECM information is stored on the enterprise SAN, the SAN is mirrored to minimize the chance of loss or damage.

**5.5 Document Lifecycle Management** – The State keeps the majority of paper-based documents around for extended periods of time and control when they get disposed of and the majority of those dispositions are done manually through various un-unified processes.

The ECM has a lifecycle management component that facilitates disposition of electronic documents based on configurable rules.

**5.6 Additional Features** – The State has audio, video, GIS, CAD, Word, PDF, email and fax information that can not readily be stored in a unified manner with paper documents.

The ECM can store any electronic content. All electronic content can be indexed for search, retrieval, association and security. Once paper documents are scanned into the ECM, they can easily be unified with other electronic content.

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VERSION DATE: Draft - December 9, 2010  
HISTORY:  
PDF FORMAT: (to be added)  
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## NITC 5-204 (DRAFT)

Technical Panel  
of the  
Nebraska Information Technology Commission

### Standards and Guidelines

**Draft Document**  
**30-Day Comment Period**

**Title: Linking a Personal Portable Computing Device to the State Email System for Data Classified as "Internal Use Only" or "Unclassified/Public"**

#### Notes to Readers:

1. The following document is a draft document under review by the Technical Panel of the Nebraska Information Technology Commission (NITC). This document is posted at <http://nitc.ne.gov/standards/comment/>.
2. If you have comments on this document, you can submit them by email to [rick.becker@nebraska.gov](mailto:rick.becker@nebraska.gov), or call 402-471-7984 for more information on submitting comments.
3. The comment period for this document ends on January 31, 2011.
4. The Technical Panel will consider this document and any comments received at a public meeting following the comment period, currently scheduled for February 8, 2011. Information about this meeting will be posted on the NITC website at <http://nitc.ne.gov/>.

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**State of Nebraska**  
**Nebraska Information Technology Commission**  
**Standards and Guidelines**

#### NITC 5-204 (Draft)

Title	Linking a Personal Portable Computing Device to the State Email System for Data Classified as "Internal Use Only" or "Unclassified/Public"
Category	Groupware Architecture
Applicability	Applies to all state government agencies, excluding higher education

#### 1. Purpose

This standard provides for the requirements to connect a personal Portable Computing Device ("PCD") to the State's email system. This standard does not apply to PCDs provided by the agency.

#### 2. Standard

##### 2.1 Procedures for Requesting Authority to Connect a Personal PCD to the State's Email System

2.1.1 Prior to connecting any personal PCD to the State's email system, a request must be submitted to the State Information Security Officer ("SISO") for review. Attachment A is the form to be used to submit a request. Completed forms should be emailed to the SISO at [siso@nebraska.gov](mailto:siso@nebraska.gov).



2.1.2 The SISO will review each request. The SISO will either approve or deny a request and communicate the decision to the requesting agency within 14 days.

## 2.2 Requirements

**2.2.1 Only the Native Microsoft Exchange active-sync method will be used as the syncing method for devices accessing the State email system.**

**2.2.2 Password protection:** Personal smart devices must use a device password for access to the devices functionality. During the process of configuring the device for syncing to the State's email system, the password protection setting will be automatically enabled on the device. Other security controls may be enabled by the State email system at any time.

**2.2.3 Storage of sensitive information:** Personal devices cannot be used to process or store sensitive State related information.

**2.2.4 Physical safeguards:** Appropriate physical security measures should be taken to prevent theft of portable devices and media. Unattended portable computing devices and media must be physically secured.

### 2.2.5 Theft or Loss:

**2.2.5.1 Reporting:** Theft or loss of portable computing devices assumed to contain sensitive information must be reported immediately to the Office of the CIO. Please call the OCIO help desk at 402-471-4636 or 800-982-2468.

**2.2.5.2 Remote data delete:** All devices that are capable of native syncing to the State's email system support the remote data wipe feature. The user is required to take steps to safeguard data which should include initiating the remote wiping process in the case of theft or loss. Mobile email devices can be removed from email access or wiped using the "options/Mobile Devices" selection after logging into your Exchange email account using Outlook Web Access (OWA) at <https://mail.nebraska.gov>

**2.2.6 Disposal and Reuse:** Personal smart device users must follow the Data Disposal and Reuse policy to properly remove data and software from the PCD before its disposal or reuse.

**2.2.7 Support:** Personal device use is not supported by the State help desk or email team. No State system will be reconfigured in order to make a particular device work and there is no guarantee that a specific device will or will not work with the current system configuration. There is no obligation on the part of the State or Agency to support any personal device.

**2.2.8 Removal of Data:** All State information contained on a device must be removed on request by the Agency Director or State Information Security Officer. The device may be "wiped" or cleared of all information remotely by the State without recourse and without compensation for personal data loss (including but not limited to loss of personal contacts, music, messages and service unavailability).

## 3. Definitions

**3.1 Portable Computing Device (PCD)** includes but is not limited to notebook computers; tablet PCs; handheld devices such as Portable Digital Assistants (PDAs), Palm Pilots, Microsoft Pocket PCs, RIM (Blackberry); smart phones; and converged devices.

**Attachment A: Request Form** (Word Document)

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VERSION DATE: Draft - December 14, 2010  
HISTORY:  
PDF FORMAT: (to be added)  
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## FORM: Request to Link a Personal Portable Computing Device to the State Email System for Data Classified as “Internal Use Only” or “Unclassified/Public”

This is a request to use a personal portable computing device (“PCD”) for the purpose of linking the device to the State’s email system. The following State exchange email account will be used in conjunction with the access:

Exchange Account: \_\_\_\_\_

To the limits dictated by the State of Nebraska and Federal laws, agency data and system owners are responsible for determining how critical and sensitive information is for their applications to insure integrity, availability, and confidentiality.

### Security Classification Levels:

The NITC Data Security Standard recognizes four basic levels of security classifications that are associated with varying degrees of known risks. (See NITC 8-RD-01: NITC Security Officer Instruction Guide). They can be summarized as follows:

**HIGHLY RESTRICTED** is for the most sensitive information intended strictly for use within your organization and controlled by special rules to specific personnel. It is highly critical and demands the highest possible security. **Not allowed on personal devices.**

**CONFIDENTIAL** is for less sensitive information intended for use within your organization, yet still requires a high level of security. It may be regulated for privacy considerations. (e.g. HIPAA) **Do not use this form. Contact the State Information Security Officer.**

**INTERNAL USE ONLY** is for non-sensitive information intended for use within your organization. The security is controlled, but not highly protected. **Use this form.**

**UNCLASSIFIED/ PUBLIC** is for information that requires minimal security and can be handled in the public domain. **Use this form.**

### Standards:

All devices irrespective of device ownership that are syncing information with the State’s email system must follow these standards:

- 1. Only the Native Microsoft Exchange active-sync method will be used as the syncing method for devices accessing the State email system.**
- 2. Password protection:** Personal smart devices must use a device password for access to the devices functionality. During the process of configuring the device for syncing to the State’s email system, the password protection setting will be automatically enabled on the device. Other security controls may be enabled by the State email system at any time.
- 3. Storage of sensitive information:** Personal devices cannot be used to process or store sensitive State related information.
- 4. Physical safeguards:** Appropriate physical security measures should be taken to prevent theft of portable devices and media. Unattended portable computing devices and media must be physically secured.

## 5. Theft or Loss:

- a. **Reporting:** Theft or loss of *portable computing devices* assumed to contain *sensitive* information must be reported immediately to the Office of the CIO. Please call the OCIO help desk at 402-471-4636 or 800-982-2468.
  - b. **Remote data delete:** All devices that are capable of native syncing to the State's email system support the remote data wipe feature. The user is required to take steps to safeguard data which should include initiating the remote wiping process in the case of theft or loss. **Mobile email devices** can be removed from email access or wiped using the "options/Mobile Devices" selection after logging into your Exchange email account using Outlook Web Access (OWA) at <https://mail.nebraska.gov>
6. **Disposal and Reuse:** Personal smart device users must follow the Data Disposal and Reuse policy to properly remove data and software from the PCD before its disposal or reuse.
7. **Support:** Personal device use is not supported by the State help desk or email team. No State system will be reconfigured in order to make a particular device work and there is no guarantee that a specific device will or will not work with the current system configuration. There is no obligation on the part of the State or Agency to support any personal device.
8. **Removal of Data:** All State information contained on a device must be removed on request by the Agency Director or State Information Security Officer. The device may be "wiped" or cleared of all information remotely by the State without recourse and without compensation for personal data loss (including but not limited to loss of personal contacts, music, messages and service unavailability).

## Recommendations:

- If your PCD must store sensitive information, periodically delete unnecessary data or email
- If available, PCD users should employ a data delete function to delete information on a device that detects a password attack
- If available, arrange for a remote data deletion service which can remotely delete sensitive information if the device is lost or stolen
- Store PCDs in a secure location or keep physical possession at all times
- Be alert and report unauthorized or suspicious activity to the Nebraska State Patrol immediately
- Do not leave equipment and media taken off the premises unattended in public places.
- Carry PCDs as hand luggage when traveling
- **Tracking:** It is recommended that devices use remote tracking capabilities
- Approved wireless transmission protocols and encryption must be used when transmitting *sensitive* information. *Sensitive* data traveling to and from the PCD must be encrypted during transmission.
- Approved remote access services and protocols must be used when transmitting *sensitive* information. See Remote Access Standard: [http://nitc.state.ne.us/standards/security/Remote\\_Access\\_Standard\\_v4\\_20070222.pdf](http://nitc.state.ne.us/standards/security/Remote_Access_Standard_v4_20070222.pdf).

## Identified NITC policies that apply to use, access and protecting information:

7-101 Acceptable Use Policy <http://nitc.ne.gov/standards/7-101.html>

8-101 Information Security Policy <http://nitc.ne.gov/standards/security/8-101.pdf>

**As a reminder:** All employees are obligated to protect the data they have access to. The use of the device must conform to all State and Agency use policies.

Violations of policy can result in disciplinary action, up to and including termination.

### Individual Justification

The undersigned State representative is requesting to use a personal device for the purpose of accessing and/or storing data with a **security classification level** of UNCLASSIFIED/PUBLIC or INTERNAL USE ONLY and includes the following as supporting justification:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Individual

\_\_\_\_\_  
Date

\_\_\_\_\_  
Agency Director

\_\_\_\_\_  
Date

Send completed form to the State Information Security Officer at [siso@nebraska.gov](mailto:siso@nebraska.gov).

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\_\_\_\_\_ Approved    \_\_\_\_\_ Denied

\_\_\_\_\_  
State Information Security Officer

\_\_\_\_\_  
Date

## FORM: Request to Link a Personal Portable Computing Device to the State Email System for Data Classified as “Internal Use Only” or “Unclassified/Public”

This is a request to use a personal portable computing device (“PCD”) for the purpose of linking the device to the State’s email system. The following State exchange email account will be used in conjunction with the access:

Exchange Account: \_\_\_\_\_

To the limits dictated by the State of Nebraska and Federal laws, agency data and system owners are responsible for determining how critical and sensitive information is for their applications to insure integrity, availability, and confidentiality.

### Security Classification Levels:

The NITC Data Security Standard recognizes four basic levels of security classifications that are associated with varying degrees of known risks. (See NITC 8-RD-01: NITC Security Officer Instruction Guide). They can be summarized as follows:

**HIGHLY RESTRICTED** is for the most sensitive information intended strictly for use within your organization and controlled by special rules to specific personnel. It is highly critical and demands the highest possible security. **Not allowed on personal devices.**

**CONFIDENTIAL** is for less sensitive information intended for use within your organization, yet still requires a high level of security. It may be regulated for privacy considerations. (e.g. HIPAA) **Do not use this form. Contact the State Information Security Officer.**

**INTERNAL USE ONLY** is for non-sensitive information intended for use within your organization. The security is controlled, but not highly protected. **Use this form.**

**UNCLASSIFIED/ PUBLIC** is for information that requires minimal security and can be handled in the public domain. **Use this form.**

### Standards:

All devices irrespective of device ownership that are syncing information with the State’s email system must follow these standards:

- 1. Only the Native Microsoft Exchange active-sync method will be used as the syncing method for devices accessing the State email system.**
- 2. Password protection:** Personal smart devices must use a device password for access to the devices functionality. During the process of configuring the device for syncing to the State’s email system, the password protection setting will be automatically enabled on the device. Other security controls may be enabled by the State email system at any time.
- 3. Storage of sensitive information:** Personal devices cannot be used to process or store sensitive State related information.
- 4. Physical safeguards:** Appropriate physical security measures should be taken to prevent theft of portable devices and media. Unattended portable computing devices and media must be physically secured.

## 5. Theft or Loss:

- a. **Reporting:** Theft or loss of *portable computing devices* assumed to contain *sensitive* information must be reported immediately to the Office of the CIO. Please call the OCIO help desk at 402-471-4636 or 800-982-2468.
  - b. **Remote data delete:** All devices that are capable of native syncing to the State's email system support the remote data wipe feature. The user is required to take steps to safeguard data which should include initiating the remote wiping process in the case of theft or loss. Mobile email devices can be removed from email access or wiped using the "options/Mobile Devices" selection after logging into your Exchange email account using Outlook Web Access (OWA) at <https://mail.nebraska.gov>
6. **Disposal and Reuse:** Personal smart device users must follow the Data Disposal and Reuse policy to properly remove data and software from the devicePCD before its disposal or reuse. Section 5 of NITC standard 8-101 identifies requirements for disposal and re-use.
7. **Support:** Personal device use is not supported by the State help desk or email team. No State system will be reconfigured in order to make a particular device work and there is no guarantee that a specific device will or will not work with the current system configuration. There is no obligation on the part of the State or Agency to support any personal device.
8. **Removal of Data:** All State information contained on a device must be removed on request by the Agency Director or State Information Security Officer. The device may be "wiped" or cleared of all information remotely by the State without recourse and without compensation for personal data loss (including but not limited to loss of personal contacts, music, messages and service unavailability).

## Recommendations:

- ~~If your PCD must store sensitive information, periodically delete unnecessary data or email~~
- ~~If available, the device PCD users should employ a data delete function to wipe information from the device after multiple incorrect passwords/PINs have been entered.~~
- ~~If available, enable device encryption functionality to encrypt local storage.~~
- ~~Turn off Bluetooth and Wi-Fi connectivity when not specifically in use.~~
- ~~Limit the use of 3<sup>rd</sup> party device applications. Unsigned third-party applications pose a significant risk to delete information contained on the device that detects a password attack~~
- ~~If available, arrange for a remote data deletion service which can remotely delete sensitive information if the device is lost or stolen~~
- Store devices PCDs in a secure location or keep physical possession at all times
- ~~Be alert and report unauthorized or suspicious activity to the Nebraska State Patrol immediately~~
- ~~Do not leave equipment and media taken off the premises unattended in public places.~~
- Carry devicesPCDs as hand luggage when traveling
- **Tracking:** It is recommended that ~~devices use~~ remote tracking capabilities are enable on devices
- Approved wireless transmission protocols and encryption must be used when transmitting *sensitive* information. *Sensitive* data traveling to and from the devicePCD must be encrypted during transmission. For browser based access, SSL encryption meets State standards.
- Approved remote access services and protocols must be used when connecting to State equipment transmitting sensitive information. See Remote Access Standard: [http://nitc.state.ne.us/standards/security/Remote\\_Access\\_Standard\\_v4\\_20070222.pdf](http://nitc.state.ne.us/standards/security/Remote_Access_Standard_v4_20070222.pdf).

## Identified NITC policies that apply to use, access and protecting information:

7-101 Acceptable Use Policy <http://nitc.ne.gov/standards/7-101.html>

8-101 Information Security Policy <http://nitc.ne.gov/standards/security/8-101.pdf>

**As a reminder:** All employees are obligated to protect the data they have access to. The use of the device must conform to all State and Agency use policies.

Violations of policy can result in disciplinary action, up to and including termination.



### Individual Justification

The undersigned State representative is requesting to use a personal device for the purpose of accessing and/or storing data with a **security classification level** of UNCLASSIFIED/PUBLIC or INTERNAL USE ONLY and includes the following as supporting justification:

\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Individual

\_\_\_\_\_  
Date

\_\_\_\_\_  
Agency Director

\_\_\_\_\_  
Date

Send completed form to the State Information Security Officer at [siso@nebraska.gov](mailto:siso@nebraska.gov).

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\_\_\_\_\_ Approved    \_\_\_\_\_ Denied

\_\_\_\_\_  
State Information Security Officer

\_\_\_\_\_  
Date

## Request for Waiver to NITC Standard 8-301 Password Standard.

According to NITC Standard 1-103 Waiver Policy, the following request is to allow a deviation to the NITC Standard 8-301. The request addresses the deviation of password construction on the AS/400 for the Kronos application due to system capabilities.

- **Agency name** - Kronos Steering Committee (NDCS/HHSS/OCIO)
- **Name, title, and contact information for the agency contact person regarding the request** - Robert Shanahan, IT Manager, NDCS 402-489-5809
- **Title of the NITC Standards and Guidelines document at issue** - Standard 8-301 *Password Policy*
- **Description of the problem or issue** – Kronos is currently out of compliance with the NITC Password Policy (and has been so since its inception) in the following areas;
  - Minimum password length is set at 6 characters
  - Sequential character limitation – limited ability, currently no enforcement
  - Does not contain three of four character types
  - Passwords are not case sensitive
- **Description of the agency's preferred solution, including a listing of the specific requirement(s) for which a waiver is requested**
  - The Kronos Coordinating Committee with support of OCIO will implement the NITC 8-301 password standard for the Kronos Timekeeping System with the exception of the criteria “must not repeat any character sequentially more than two (2) times”. This criteria is not supported natively by the AS/400 operating system; the AS/400 platform hosts the Kronos Timekeeping System. The AS/400 operating system does offer a more restrictive criteria which eliminates any repeating consecutive characters, but the Kronos Coordinating Committee feels this will be a hardship for users if imposed because it would be inconsistent with password rules for other application systems which adhere to the NITC 8-301 password standard as written. Imposition of more restrictive criteria for this single system would result in minimal security gains, and would incur significant costs in lost productivity and increased support.
  - Based on this information, the Kronos Steering Committee requests a waiver from the NITC 8-301 password standard, specifically the sequential character criteria.
- **Any additional information and justification showing good cause for the requested waiver**
  - NA

### Background:

The Kronos Steering Committee, at their December, 2010 regular meeting, agreed to request, in accordance with NITC Standard 1-103 a waiver to Standard 8-301 *Password Policy* as it pertains to the Kronos system.

The Kronos System is an electronic time keeping system, utilized as a time clock system, by the Department of Health and Human Services and the Department of Correctional Services. The Kronos System is supported by the Office of the CIO. The Kronos Steering Committee is comprised of authorized representatives of each agency, who are empowered to make policy and operational decisions as it relates to use and support of the Kronos tools.

# NITC 8-301

## State of Nebraska Nebraska Information Technology Commission Standards and Guidelines

### NITC 8-301

Title	Password Standard
Category	Security Architecture
Applicability	Applies to all state agencies, boards, and commissions, excluding higher education

#### 1. Purpose

Passwords are a primary means to control access to systems; therefore all users must select, use, and manage passwords to protect against unauthorized discovery or usage.

#### 2. Standard

##### 2.1 Password Construction

The following are the minimum password requirements for State of Nebraska passwords:

- Must contain at least eight (8) characters
  - Must not repeat any character sequentially more than two (2) times
- Must contain at least three (3) of the following four (4):
  - At least one (1) uppercase character
  - At least one (1) lowercase character
  - At least one (1) numeric character
  - At least one (1) symbol
- Must change at least every 90 days
- Can not repeat any of the passwords used during the previous 365 days.

##### 2.2 Non-Expiring Passwords

An agency may request a non-expiring password by submitting the form found in Appendix A. All non-expiring passwords should meet the character requirements listed in Section 2.1.

**2.2.1 Automated System Accounts.** Agencies may use non-expiring passwords for automated system accounts. Examples of automated system accounts include those that perform backups or run batch jobs.

**2.2.2 Multi-user Computers.** Agencies may use non-expiring passwords on multi-user computers. Examples of multi-user computers include those computers in kiosks or training labs, where users have limited or restricted access to state resources.

**2.2.3 System Equipment/Devices.** It is common for many devices (e.g. IP cameras, HVAC controls) in today's IT environment to utilize login capabilities to protect the device from unauthorized access. While many of these devices make use of a user ID and password in a manner similar to those found while authenticating a user, the distinction to be made is that the User ID is used to authenticate the device itself to the system and not a person.

**Attachment A: Non-Expiring Password Request** (Word Document)

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HISTORY: Adopted on September 18, 2007. Amended on November 12, 2008.

PDF FORMAT: <http://nitc.ne.gov/standards/8-301.pdf>

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## Non-Expiring Password Request

This is a request for a non-expiring password for the following application, system, or account:

To the limits dictated by the State of Nebraska and Federal laws, agency data and system owners are responsible for determining how critical and sensitive information is for their applications to insure integrity, availability, and confidentiality.

### Security Classification Levels

The NITC Data Security Standard recognizes four basic levels of security classifications that are associated with varying degrees of known risks. (See NITC 8-RD-01: NITC Security Officer Instruction Guide). They can be summarized as follows:

**HIGHLY RESTRICTED** is for the most sensitive information intended strictly for use within your organization and controlled by special rules to specific personnel. It is highly critical and demands the highest possible security.

**CONFIDENTIAL** is for less sensitive information intended for use within your organization, yet still requires a high level of security. It may be regulated for privacy considerations. (e.g. HIPAA)

**INTERNAL USE ONLY** is for non-sensitive information intended for use within your organization. The security is controlled, but not highly protected.

**UNCLASSIFIED/ PUBLIC** is for information that requires minimal security and can be handled in the public domain.

### Agency Justification

The undersigned agency representative has been authorized to request a **non-expiring password** for the application and data named above with a **security classification level** of \_\_\_\_\_ and includes the following as supporting justification:

\* \* \* \* \*

### Office of the CIO Action

\_\_\_ Granted    \_\_\_ Denied

Comments:

Agency Representative	Date	Office of the CIO State Information Security Officer	Date