MEETING AGENDA

Technical Panel of the Nebraska Information Technology Commission

Tuesday, December 14, 2010 9:00 a.m. Varner Hall - Board Room 3835 Holdrege St., Lincoln, Nebraska

AGENDA

Meeting Documents: Click the links in the agenda or <u>click here</u> for all documents (25 pages).

- 1. Roll Call, Meeting Notice & Open Meetings Act Information
- 2. Public Comment
- 3. Approval of Minutes* October 12, 2010
- 4. Enterprise Projects
 - Final Reports
 - \circ Administrative Services-State Personnel Talent Management Software Solution
 - \circ University of Nebraska and State College System NeSIS and SAP
 - Other Project Updates
- 5. Standards and Guidelines
 - Set for 30-Day Comment Period*
 - <u>NITC 3-202</u>: Land Record Information and Mapping Standard (Revised)
 - <u>NITC 5-101</u>: Enterprise Content Management System for State Agencies
 - <u>NITC 5-204</u>: Linking a Personal Portable Computing Device to the State Email System for Data Classified as "Internal Use Only" or "Unclassified/Public"
 - Request for Waiver
 - Department of Labor request for waiver from requirements contained in NITC 8-301.
- 6. Election Technical Panel Chair for 2011*
- 7. Regular Informational Items and Work Group Updates (as needed)
 - Accessibility of Information Technology Work Group Horn
 - Learning Management System Standards Work Group Langer
 - Security Architecture Work Group Weakly
- 8. Other Business
- 9. 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 <u>Nebraska Public Meeting Calendar</u> on November 5, 2010. The agenda was posted to the NITC website on December 10, 2010 and revised on December 13 2010.

TECHNICAL PANEL of the Nebraska Information Technology Commission Tuesday, October 12, 2010, 9:00 a.m. Varner Hall - Board Room 3835 Holdrege Street, Lincoln, Nebraska PROPOSED MINUTES

MEMBERS PRESENT:

Brenda Decker, CIO, State of Nebraska Kirk Langer, Lincoln Public Schools Mike Winkle, NET

MEMBERS ABSENT:

Walter Weir, CIO, University of Nebraska, Chair Christy Horn, University of Nebraska

ROLL CALL, MEETING NOTICE & OPEN MEETINGS ACT INFORMATION

In the Chair's absence, Brenda Decker, called the meeting to order at 9:05 a.m. Three members were present at the time of roll call. A quorum existed to conduct official business. The meeting notice was posted to the NITC website and <u>Nebraska Public Meeting Calendar</u> on September 15, 2010. The agenda was posted to the NITC website on October 8, 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 SEPTEMBER 14, 2010 MINUTES

Mr. Winkle moved to approve the <u>September 14, 2010</u> minutes as presented. Mr. Langer seconded. Roll call vote: Decker-Yes, Langer-Yes and Winkle-Yes. Results: Yes-3, No-0, Abstained-0. Motion carried.

ENTERPRISE PROJECTS UPDATE: DHHS – ACCESSNEBRASKA

Karen Heng and Eric Hendrichsen

The benefits inquiry went live in July via the "My Account" feature. There are currently 10,000 users. This is a higher number than expected. Other features being developed include allowing customers to see written notices from DHHS, as well as developing an easier to use menu page. In regards to document imaging, the project has completed the conversion scanning of the current case load and will finishing imaging the foster care caseload. So far the scanning has been done using smaller Canon scanners. The larger Canon scanners are in Lincoln and Omaha. These scanners can scan over 800 pages a minute. Beginning November 15th, files will be uploaded. The centralized mail processing will begin in November also. The Universal Caseload Management System has been tested and is due to be implemented on November 15th. A Pilot Plan has been developed and will run November 15 to mid May. Cases will be moving gradually to the new system. The Southeast service area will be involved in the Pilot Plans and it will include the Lincoln Service Center. There is a ribbing cutting ceremony today for the Lincoln Service Call Center on Victory Lane. Members were invited to attend and get a tour of the facility.

The project has been discussing methods for monitoring customer services. The project will be doing customer surveys, as well as having customers do a survey after receiving web services. The project received a grant from the USDA Food & Nutrition Services. Phase 1 of the grant is a partnership with

food banks to computerize their services. Phase 2 will involve the development of a web services tool that will let customers upload documents into the system.

The Department of Health and Human Services along with Dept. of Revenue have had monthly IVR Users Group meetings with the Office of the CIO. The meetings have been helpful and discussions are occurring regarding the need to establish standards and guidelines.

Project staff entertained questions from the panel members. The project will provide a follow-up 6 month report in June.

ENTERPRISE PROJECTS - OTHER PROJECT UPDATES

Ryan Christensen

Bob Wilhelm should be contacted for the Interoperability project status updates. Kevin Keller should be contacted for the Content Management Project status updates. The owner for the Content Management Project should be changed from the Secretary of State to the Office of the CIO.

PROJECT REVIEWS - FY2011-2013 BIENNIAL BUDGET - COMMENTS AND RECOMMENDATIONS TO THE NITC*

Project proposal summary sheets, Full text of the project proposals

Mr. Winkle was present to answer any questions regarding this project. The NET project has been reviewed and scored by three technical reviewers. NET was given an opportunity to provide clarification and feedback. This would be a considered a mission critical project by the agency.

Ms. Decker moved to provide the following comments on project 47-01 NET Satellite Replacement Project: The Technical Panel, having reviewed the project proposal, finds that:

- 1. The project is technically feasible.
- 2. The proposed technology is appropriate for the project.
- 3. The technical elements can be accomplished within the proposed timeframe and budget.

Mr. Langer seconded the motion. Roll call vote: Langer-Yes, Winkle-Abstain and Decker-Yes. Results: Yes-2, No-0, Abstained-1. Motion carried.

REGULAR INFORMATIONAL ITEMS AND WORK GROUP UPDATES (as needed)

No reports.

OTHER BUSINESS

There will be a press conference on October 19th in York, Nebraska to launch Phase 3 Beneficial Use of the Public Safety System.

The e-Government Conference is being held on November 1st is at the Embassy Suites in Lincoln. The event is hosted by Government Technology and the Office of the CIO.

ADJOURN

Mr. Langer moved to adjourn. Mr. Winkle seconded. All were in favor. Motion carried.

The meeting was adjourned at 9:46 a.m.

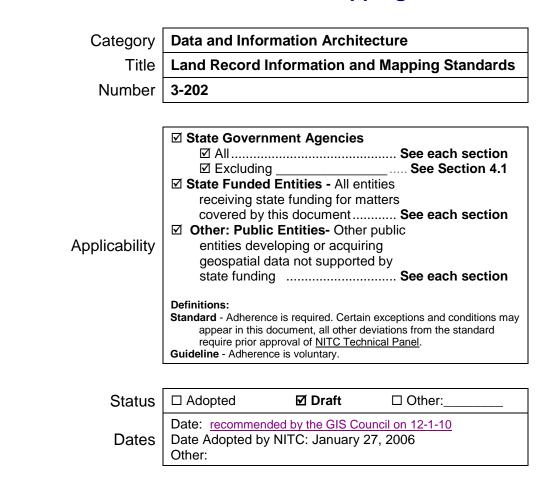
Meeting minutes were taken by Lori Lopez Urdiales and reviewed by Rick Becker of the Office of the CIO.



Nebraska Information Technology Commission

STANDARDS AND GUIDELINES

Draft Revision, 12-1-10 Land Record Information and Mapping Standards



Prepared by: The Nebraska GIS Steering Committee and endorsed and referred to the Technical Panel of the Nebraska Information Technology Commission for NITC consideration. <u>Draft revision prepared by GIS Council</u> <u>Working Group, and recommended for adoption by the NITC GIS Council on 12-1-10</u> 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 <u>(State)</u> 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 <u>PLSS Geodetic Framework</u>. 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.

<u>State Agencies:</u> Standard <u>State Funded Entities:</u> Standard <u>Other:</u> 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 <u>Progressive Monumentation</u>. In addition, each county (or municipality) that is planning to develop a GIS/LIS-based cadastre program should also consider

Suggested draft revision of existing Nebraska Information Technology Commission Standard and Guidelines 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 <u>Minimum Horizontal Accuracy Standard</u>. 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 <u>Additional Accuracy Considerations</u>. 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:

Relative Size	Map Scale		Nat'l Horizontal Map	Equivalent
of Property Parcels			<u>Accuracy Std.</u>	<u>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

 1:12,000
 (1"= 1,000')
 ±33.3 ft.
 1:10,000

 State Agencies:
 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 <u>feature or</u> layer <u>consisting consists</u> of legal land subdivisions. These are aliquot portions of the PLSS, filed subdivision plats and irregular tracts defined by filed deeds.

b). The parcel <u>feature or</u> 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 <u>features or</u> 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 geographicinto 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:StandardState Funded Entities:StandardOther:Guideline

Suggested draft revision of existing Nebraska Information Technology Commission Standard and Guidelines **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 <u>tied-referenced</u> 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.

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

School District
Commercial, Industrial, Agriculture, Recreational, Mineral Interest-
Nonproducing, Mineral Interest-Producing, State Assessed, or
Exempt)
Status NPAT defined categories: (Vacant, Improved or Improved only)
(Improved, Unimproved, or IOLL)
Location <u>NPAT defined: (Urban, Sub-urban, Rural) (NPAT defined)</u>
City Size 1 st class, 2 nd class, primary, metro, or village
Source Document Sales/transfer reference or document (book & page & date)
Sales Date Most recent sales/transfer date
Sales Value Most recent sales value
State Agencies: Standard State Funded Entities: Standard Other: Standard

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 crosssection 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

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
- 6.2 Nebraska Guidebook for Local Government Multipurpose Land Information Systems. <u>http://nitc.nebraska.gov/gisc/docs/landrecords/guidebook.html</u> <u>http://www.calmit.unl.edu/gis/LIS_Stds_Intro.html</u>
- 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/publications/documents/metadata/workbook_0501_bmk.pdf

NITC 5-101 (DRAFT)

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. Mangers 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.

VERSION DATE: Draft - December 9, 2010 HISTORY: PDF FORMAT: (to be added)

NITC 5-204 (DRAFT)

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.

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.

2.2.5.1 **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 takes 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)

VERSION DATE: Draft - December 9, 2010 HISTORY: PDF FORMAT: (to be added)

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.
- 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 takes 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.

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 <u>UNCLASSIFIED/PUBLIC or INTERNAL USE ONLY</u> and includes the following as supporting justification:

Individual	Date
Agency Director or Representative	 Date
Send completed form to the State Info	ormation Security Officer at siso@nebraska.gov.
Approved Denied	
State Information Security Officer	Date

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
- \circ Must not repeat any character sequentially more than two (2) times
- Must contain at least three (3) of the following four (4):
 - \circ At least one (1) uppercase character
 - \circ 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)

HISTORY: Adopted on September 18, 2007. Amended on November 12, 2008. PDF FORMAT: <u>http://nitc.ne.gov/standards/8-301.pdf</u>

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