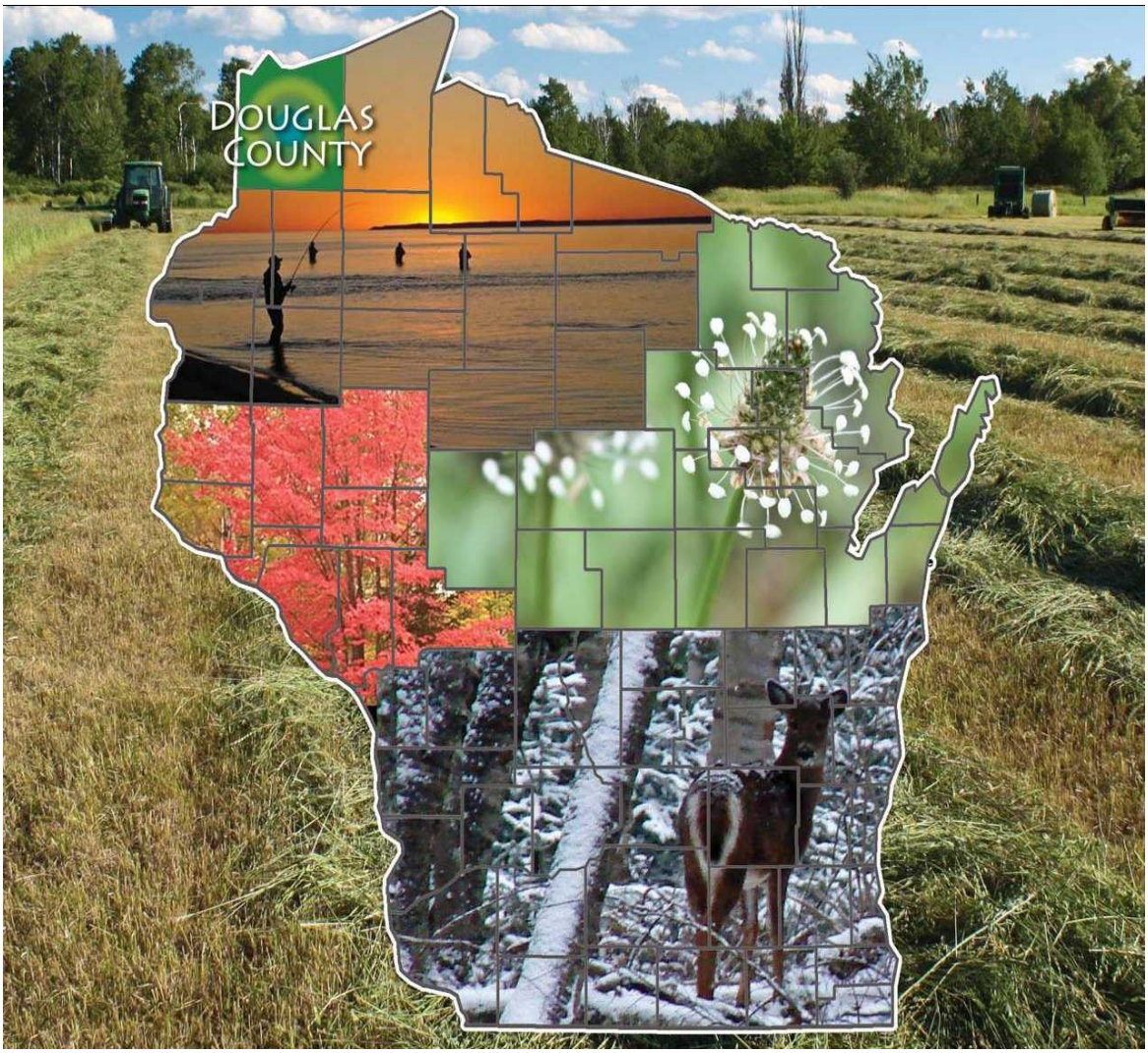

Douglas County

LAND RECORDS MODERNIZATION PLAN
2010 - 2015

Approved by Land Information Council on March 31st, 2011

I. EXECUTIVE SUMMARY

A. Plan designer

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B. Participants in the Plan Preparation

This plan was reviewed and approved by the Douglas County Land Information Council.

Douglas County Board of Supervisors member of the Land Information Council:
John Robinson, c/o Douglas County Clerk's Office 1313 Belknap Street, Superior, WI 54880

Required Members include:
Gayle Wahner, c/o Douglas County Register of Deeds Office 1313 Belknap Street, Superior, WI 54880
Linda Helenius, c/o Douglas County Treasurer's Office 1313 Belknap Street, Superior, WI 54880
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Other members include:

Land Information Representative – *Jon Fiskness* (COS GIS Coordinator)
Realtor – *Maria Letsos* – (Realtor, President Duluth Area Association of Realtors)
Public Safety Representative – *Dave Sletten* (DC Emergency Mgmt Planner)
County Surveyor - *Ben Klitzke* (DC County Surveyor/LIO)
Tom Bridge – City of Superior Councilor

C. Summary of the Plan

Douglas County is submitting this *Land Records Modernization Plan* for review and adoption. The focus of this plan is to define land record modernization goals and objectives for the next five years. This Plan defines Douglas County's goals and objectives, reports the progress of its current activities, and describe new initiatives that it would like to undertake. It also describes who maintains land records within the county; how the county has completed or plans to complete the individual foundational elements of modernization; how the county will comply with state-wide standards; and how the county will comply with state-wide standards; and how the county plans to integrate and share this information.

D. County Land Information Web Site: http://douglascountywi.org

E. Municipal Land Information Web Site: http://www.ci.superior.wi.us

II. LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

A. Goals and Objectives

The primary goal of the County Land Information program is to acquire, implement and maintain a Land Information System (LIS) that will meet the needs of the public and private sectors, as well as its users within the county and other governmental entities in a timely and cost effective manner.

The *City of Superior/Douglas County Geographic Information Systems (GIS) Strategic Plan* identifies and details many of the goals of the County Land Records.

- **Theme 1: Data Needs, Maintenance and Development**
  - Maintenance of Geocoded Addresses - Ongoing
  - Maintenance of Douglas County Road Centerlines - Ongoing
  - Development of a Linear Network (Routing) System - 2010
  - Development of data maintenance schedules - Ongoing
  - Identify other data needs – Ongoing
  - Development process for parcel adjustment to updated PLSS data - Ongoing
  - Platbook revisions and publishing- Ongoing
  - LIDAR for Douglas County - Ongoing
  - Integration of Pictometry aerial photos - 2009
  - Redistricting for Douglas County – Ongoing
  - Complete Public Land Survey System Remonumentation of high density population (parcel) areas. County Surveyor will obtain County coordinate on PLSS corners to be used for PLSS corner and parcel adjustments. - Ongoing

- **Theme 2: Workflow/Document Tracking Assessment**
  - Setup off site locations with GIS and data - Ongoing
  - Implement the National Grid for EMS in GIS - Ongoing
  - Develop partnerships with utilities, LUG's, in Douglas County for better data sharing - Ongoing
  - City/County GIS based permit tracking system – Ongoing

- **Theme 3: GIS Training Needs**
  - Identify GIS staff training needs- Ongoing
  - Identify GIS users and future training needs- Ongoing
  - Create training documents and resource lists- Ongoing

- **Theme 4: Hardware/Software Needs**
  - Identify hardware/software needs relating to GIS and Land Records- Ongoing
  - Integrate GIS into all departments as needed- Ongoing
  - Expand GIS in COS/DC- Ongoing

- **Theme 5: GIS Budget for City of Superior and Douglas County**
  - Maintain a data sharing/requesting/purchasing policy- Ongoing

- **Theme 6: Web Applications**
  - Using ArcGIS Server technologies, develop and implement web applications for internal and external customers- Ongoing
  - Upgrade to the newest ArcGIS Server technologies for more seamless data delivery and web management- Ongoing
  - Continued funding for ESRI Small Government Enterprise Licensing Agreement-
  - Continued funding for Image Silo data storage & access database- Ongoing

- **Theme 7: Specialized Applications and Services**
  - Develop specialized (custom) applications for GIS users- Ongoing
  - Development of potential “in kind” GIS services for LUGs- Ongoing

- **Theme 8: GIS Work Plans and Personnel**
  - Creation of a personnel system for reviewing GIS staff work, performance and professional development- Ongoing
  - Development of a GIS Long Range Plan - 2012
  - Develop annual GIS work plans for GIS staff- Ongoing
  - Conduct GIS Personnel Reviews- Ongoing
  - Establish GIS Staff professional development and Goals- Ongoing
  - GIS Project management- Ongoing
  - Continuation of GIS Agreement between City and County for GIS Services, sharing, skills and data- Ongoing

- **Theme 9: GIS Collaboration**
  - Collaborate with other GIS users and agencies- Ongoing

- **Theme 10: GIS Analysis**
  - Use GIS for analysis- Ongoing

- **Theme 11: Cartography Needs**
  - Determine the cartographic needs for COS/DC- Ongoing
  - Create ESRI layer files for GIS users to easily symbolize maps- Ongoing
  - Create the most commonly requested maps in PDF form on the COS/DC web site - Ongoing

1. **Keys to Achieving Goals:**

   The county will ensure that the information is readily translatable for use by any state or local county/agency or public utility. Data is maintained using non-proprietary software, which ensures that data can be readily translatable.

   The county will ensure that the information is easily retrievable by any state or local county/agency or public utility. Data will be retrievable through several mediums such as public terminals, the World Wide Web, http://www.ci.superior.wi.us, CD-ROMs and other appropriate technology.

   The county will ensure that the information is geographically referenced for use by any state or local, county or public utility. The County data will be geographically referenced using the Douglas county coordinate system that will ensure that the data can be easily shared.

   The time line for implementation of the goals in this Plan are dependent on the continuation of the Wisconsin Land Information Program’s (WLIP) grant program and the amount of retained fees collected.

2. **Database Design**:

   The County's geographic system is designed to support the existing systems implemented by the County.

   The database design for land records information conforms to existing county standards,

which allows for integration. The county has migrated to enterprise Geo database technology (SDE) to reduce redundancy and improve efficiency and reliability. All spatial data are topologically structured and designed to integrate back to the county's database design as described within the *City of Superior/Douglas County Enterprise Geospatial Data Infrastructure*. Most GIS datasets are documented with compliant metadata.

County Network: The County has a Windows network and a series of Windows based servers which host the County Tax, Land, Financial, Zoning, Register of Deeds and Imaging systems. The Land Records program utilizes ESRI, GCS and AutoCAD products

B. <u>Progress Report on Ongoing Activities</u>

a. The City of Superior/Douglas County GIS Strategic Plan has played a very important role in identifying and prioritizing goals and objectives. With the current staff levels, Douglas County is currently achieving the goals and objectives listed in this plan.
There have been significant changes in the goals and objectives from those described in the county's previous plan. Fortunately, it is because Douglas County met and completed many of those goals.

C. <u>New Initiatives</u>

1. **Proposed Projects:**

a. *Adjustments to PLSS & parcel layer*: Adjust PLSS & parcel layer from accurate survey coordinates as updates to PLSS section and quarter section corner data becomes available.
b. *Cemetery Modernization and Inventory Project: Mapping and inventory of + 50,000 graves located in Douglas County. Time line: 3-5 years depending on funding and staffing levels.*
c. *Scanning and Indexing survey documents: Records of three retired surveyors and historical survey maps (approx. 10,000 documents). Timeline: based on staff availability.*
e. Ortho. Rectified 1938 Imagery Project: Date correlates with Works Progress Administration survey remonumentation completed in Douglas County. Time line: based on budget restraints.

2. **Assistance Requested:**

a. Technical Assistance: The LIO List Server provides insight on current issues. The County utilizes ESRI on-line training courses to provide technical training for individual/group GIS related projects.
b. Finances: The County plans to use retained fees and WLIA grant dollars to fund proposed projects and will continue to pursue other funding sources.
c. Strategy: The County provides and maintains land information on its website and also provides free access to City/County GIS data download through FTP site.
d. Repository: The County will participate in the statewide GIS repository.
e. Procurement processes: The County will comply with state and county policies for procurement

3. **Problems Encountered:** There are numerous projects that Douglas County would like to accomplish to enhance the efficiencies and accuracy of Land Records. The two re-occurring obstacles are staffing and funding issues.

D. Custodial Responsibilities (§ = State Statute, IP= Internal Policy)

1. *Land Information Officer/Land Records GIS Staff*

a) Current Land Records responsibility and duties.

(1) Coordinates land information projects within the county. (§59.88)
(2) Prepares the Countywide Plan for land records modernization.
(3) Oversees the LIS/GIS portion of the countywide computer network and data processing. (IP)
(4) Maintains a countywide layering scheme for all mapped entities. (IP)
(5) Maps and maintains all digital parcel maps. (IP)
(6) Works on special projects for individual departments, municipalities, agencies, and the public and private sector. (IP)
(7) Oversees the integrity of maps and corresponding land records data submitted or created for use in the countywide GIS/LIS program. (IP)
(8) Budgets and oversees grants for use in land records modernization efforts.
(9) Maintains County IMS site. (IP)
(10) Maintenance of digital shore land, floodplain, and recreation maps. (IP)
(11) Maintain hard copy parcel maps, including property divisions, splits, and merges.
(12) Maintain or oversee maintenance of digital parcel maps. (IP)

b) Future Land Records responsibilities and duties (expected or willing to assume).

(1) Educating users in the creation of maps and the use of GIS.
(2) Program user interfaces for data entry and GIS queries.

2. *Register of Deeds*

a) Current Land Records responsibility and duties

(1) Records and stores deeds, mortgages, plats, and associated land records. (§59.21) and maintains its corresponding database.
(2) Maintains a computerized tract index and grantor/grantee index. (§59.21)
(3) Maintains a database of description and ownership information on all parcels (§70.09)
(4) Responsibility for the use and management of a document imaging system. (IP)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

3. *County Clerk*

a) Current Land Records responsibility and duties

(1)Maintains hard copy electoral and jurisdictional maps. (§5-10)
(2) Maintains highway and road relocation orders. (§32.05, 84.09)
(3) Maintain a state trunk highway system map. (§84.02)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

4. *Emergency Management*

a) Current Land Records responsibility and duties.

(1) Verify property addresses and road names for 911 data base. (IP)
(2) Maintains records on hazardous chemical storage. (§323.60)
(3) Maintains records on previously reported chemical spills. (§323.60)
(4) Maintains records on damages to public & private properties. (§323.30)
(5) Maintains hazardous substance info. & emergency planning. (§323.60)
(6) Maintains records of Emergency Response Teams. (§323.70)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

5. <u>County Surveyor</u>

a) Current Land Records responsibility and duties

(1) Maintains information on PLSS corners. (§59.49)

(2) Maintains information on the High Accuracy Network (HARN) densification in the county.

(3) Maintains filing and scanning of Maps of Survey and U.S. Public Land Survey Monument Record sheets as provided to its office. (IP)

(4) Oversee PLSS monument maintenance activities. (IP)

(5) Scans and maintains other documents related to survey records. (IP)

(6) Maintain a countywide database and GIS of PLSS section corners. (IP)

(7) Completes and oversees Douglas County Remonumentation Program. (IP)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

6. <u>Zoning Department</u>

a) Current Land Records responsibility and duties

(1) Maintain zoning and land use maps as approved by unincorporated municipalities. (§59.69)

(2) Maintain shore land and floodplain zoning. (§59.69)

(3)Review land division in the form of plat and CSM reviews. (§59.69)

(4) Enforces county zoning and building ordinances. (§59.69)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

7. *<u>Land Conservation Department</u>*

a) Current Land Records responsibility and duties (Chapter §92)

(1) Administer Land and Water Resource Management Plan. (§92.10)

(2) Maintains natural resource data and landowner plans in administration of Wisconsin Soil and Water Resource Management Program. (§92.14)

(3) Administer Farmland Preservation Program (§91.10)

(4) Administer Wildlife Damage Program. (§29.889)

(5) Maintain Upper St. Croix/Eau Claire Rivers Priority Watershed Project. (§92.14)

(6) Maintain Aquatic Invasive Species Strategic Plan. (IP)

(7) Maintain digital watershed maps. (IP)

(8) Maintain digital Comparative Analysis of Sub-watersheds data.

(9) Maintain digital shoreland mitigation inspection database. (§92.17)

(10) Maintain digital culvert inventory data base. (IP)

(11) Maintain digital wetland restoration inventory database. (IP)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

8. *<u>Highway Department</u>*

a) Current Land Records responsibility and duties

(1) Maintains a filing system for right-of-way design and as-built plans.

(2) Maintains sign inventory.

(3) Maintains driveway inspection permits.

b) Future Land Records responsibilities and duties (expected or willing to assume). None

9. *<u>Real Property Lister/Treasurer</u>*

a) Current Land Records responsibility and duties

(1) Maintains and assigns parcel numbers of all real estate & personal property in Douglas County. (IP)

(2) Maintains Tax Roll information for rural Douglas County, which includes current ownership information, mailing addresses, brief legal descriptions with calculated acreages, general land classification with valuation of each classification, estimated fair market values, exempt property and DNR contracted property, property address and lottery credits. (IP)

(3) Maintenance of public schools, WITC, Sanitary, BID, TIF and other special districts needed for accurate disbursement of set levies. (IP)
(4) Maintains mill rate figures, special assessments/charges for each municipality.
(5) Collection of general property taxes. (§74.07)
(6) Preparation of acquiring and sale of tax delinquent properties. (IP)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

10. *Douglas County Forestry Department*
a) Current Land Records responsibility and duties
(1) Maintain timber stand polygons on Douglas County Forest Land and Special Use Land. (IP)
(2) Maintain gas tax roads (County Forest) and forest access roads. (IP)
(3) Maintain Snowmobile/ATV trails. (IP)

b) Future Land Records responsibilities and duties (expected or willing to assume). None

11. *Veterans Services Administrator*
a) Current Land Records responsibility and duties
(1) Maintain a list of veteran burials in Douglas County

b) Future Land Records responsibilities and duties (expected or willing to assume). None

E. Framework Data, System Implementation and Statewide Standards

1. Geographic Positioning Reference Framework

a. **Geodetic Control Network:** The County has completed densification of the High Accuracy Reference Network (HARN) to the tertiary level using GPS and the Wisconsin Department of Transportation standards. The county will be responsible for maintenance of the HARN Densification.

b. **Public Land Survey System:** The County has completed 30% of the remonumentation and geodetic control of the Public Land Survey System (PLSS) for section and quarter section corners. This work meets the requirements established in state statutes and meets at least second order class II standards.

2. Orthoimagery and Georeferenced Image Base Data

a. **Photogrammetric Base Maps:** The County has digital raster graphics of the USGS 7.5 Minute Topographic maps and a series of images that are available for use in a digital format which are in State Plane North coordinates are 1998.
b**. Digital Orthophoto (DOP):** The County has a series of images that are available for use in a digital format which are in Douglas County coordinates. The dates that are available are: 2006, 2007 and 2009. The County also has the NAIP images for the dates available are: 2005, 2006, and 2008. The County has no established cycle for acquisition of new ortho-photography, but rather base the cycle on financial resource availability.
c**. Digital Raster graphics**: None
d. **Satellite Imagery**: None
e. **Oblique Aerial Imagery:** County wide Pictometry Spring 2009 (leaf off).
f. **Historical Aerial imagery:** Digital Orthophoto's available for years: 1938 (scanned, but not georeferenced), 1948, 1962, 1973, 1992, 1973, 1992, & 2000. Black and white imagery of villages and C.O.S. 1999.

3. Elevation Data Products and Topographic Base Data.

a. **Digital Elevation Models:** 30 meter
b**. Digital Terrain Models:** None
c. **Triangulated Irregular Networks:** none
d. **Contours**: Derived from 30 meter D.E.M.
e. **LIDAR:** available for C.O.S. & Lake Superior shoreline.
f. **IFSAR** data: None

4. Parcel Mapping

a. **Refer Boundaries:** The County is maintaining the digital parcel mapping for the entire county. The parcel mapping is referenced to the Public Land Survey System (PLSS). The parcel map is based on the Wisconsin Department of Natural Resources 24k Landnet database as the framework for the PLSS corner position. As updated information for PLSS corners becomes available through remonumentation, the parcel maps are adjusted. The method of parcel mapping is by ArcGIS editing tools and board digitizing.

b**. Do Not Refer Boundaries:** None

c. **Coordinate System Used:** Douglas County Coordinate System

d. **Parcel ID:** The county parcel ID numbering system partially conforms to the WLIB parcel numbering system standards.

5. Parcel Administration and Assessment Information

a. **Design:** The County is developing a parcel administration design that has property records and boundary information referenced to the PLSS.

b. **Activities:** With the primary PIN, links can be established back to the Tax, Land, Zoning and Register of Deeds systems. Links can also be established by site address and owner name. The county has a document imaging system that will allow links back to actual copies of recorded documents.

1. Parcel ID: Assigned by Real Property Lister.
2. Tax data: Data maintained by Real Property Lister through GCS database.
3. Site Address: Assigned by D.C. Zoning Dept.
4. Owner Name & Address: Data maintained by Real Property Lister through GCS database and shown in parcel data.
5. Description/current document pertaining to parcel: Register of Deeds, GCS maintains brief legal description
6. Document imaging: Performed by Register of Deeds.
7. Real estate transactions: Register of Deeds & GCS.
8. Easements & restrictions (Including conservation easements): Some easements of record are portrayed on tax parcel maps.
9. Tax exempt status: Appear in GCS data.
10. Zip codes (Including + 4): Only shown in Owners Address field.
11. Assessment class: Changes to assessment class are submitted by Town/City Assessor to the Real Property Lister via GCS.
12. Public lands: Appear in GCS & tax parcel maps.
13. Liens: Register of Deeds.
14. Evidence of title: Register of Deeds.

6. Street/Road Centerlines, Address Ranges and Address Points

a. **Transportation Network**: The County has a complete transportation network. The county has completed a linear network.

b. **Right-of-Way**: Right-of-way areas were mapped during parcel conversion.

c. **Centerlines**: The County has mapped all centerlines for the county and met local standards which are geocoded and are currently at a maintenance phase.

d. **Address Ranges**: Data acquisition is complete in 2010 and maintenance is ongoing.

e. **Site Address Database**: Data acquisition is complete and maintenance is ongoing.

f. **Address Point / Driveway**: Complete: Geocoded, at a maintenance phase.

g. **Road Names**: Road names have been assigned to the centerline file.

h. **Functional Class**: Functional classes have been assigned to the centerline file.

i. **Places/Landmarks**: None

j. **MSAG**: Centerline/Addresses match the County MSAG and local standards.

k. **Emergency Planning**: Hazardous Materials data is complete, other data is being developed to support efforts of the Emergency Management Planner.

l. **Wireless 911**: The geographic framework exists to support Wireless 911; however until the technology is implemented is not fully known if all the data is currently present.

7. Hydrography, Hydrology and Wetlands Mapping

a. **Hydrography**: Complete from WIDNR data.

b. **Watersheds**: Will obtain from the WI DNR

c. **Hydrogeology:** Will obtain from the WIDNR

d. **Impacts on environment:** none

e. **Wetlands Mapping:** 1991 WIDNR Digital

8. Soils Mapping, Land Cover and other Natural Resource Data

a. **Soils mapping activities:** Obtain any new soils data through the NRCS Soilsmart and web survey. Currently use 2005 USDA layer.

b. **Land Cover**: Obtain from WIDNR.

c. **Forests**: Obtain from Douglas County Forestry Department.

d. **Geology**: Obtain from the Wisconsin Geologic Society and NRCS.

e. **Hydrogeology**: Completed by WNHGS.

f. **Non-Metallic Mining**: Permitting and maintenance by Douglas County Zoning Dept.

g. **Endangered Resources**: NWRPC, requirement of comprehensive plan

h. **Impact on Environment**: None

9. Land Use Mapping

a. **Land Use**: The County worked with Northwest Regional Planning Commission to have the land use mapped for the 2010 comprehensive plan. The land use assessment evaluations and corresponding acreage are determined by the municipal assessors, and maintained by the Real Property Lister.

b. **Future Land Use**: Future land use and Comprehensive Plan was completed for the entire county. The County is in the process of implementing the Comprehensive Plan through a complete zoning revision process.

10. Zoning Mapping

a. **Zoning Districts:** Zoning districts are mapped for all areas that have some type of zoning.

b. **Shore lands**: Shore land zoning districts have not been mapped. County does not have all the navigable waterways defined.

c. **Floodplains**: The County is currently reviewing preliminary digital firm maps produced by the WIDNR for approval by FEMA in 2011.

d. **Environmental corridors**: None

e. **Burial Sites**: Acquired from Wisconsin Historical Society.

f. **Archeological Sites**: Acquired from Wisconsin Historical Society.

g. **Historical/Cultural Sites**: Acquired from Wisconsin Historical Society.

11. Election and Administrative Boundary System

a. **Election (voting districts) boundaries:** Created & maintained by D.C./C.O.S.
b. **Legislative districts:** Acquired by State of Wisconsin
c. **Utility districts:** COS/Environmental services & utility companies.
d. **School districts:** Created & maintained by D.C. & State of Wisconsin.
e. **Tax incremental financial districts:** Created & maintained by C.O.S.
f. **Agency administrative districts and Zip Codes:** Created & maintained by D.C.
g. **Census geographies:** Acquired from U.S. Census Bureau. Awaiting 2010 data.
    1. **Blocks:**
    2. **Block groups:**
    3. **Tracts:**
    4. **Designated places:**
    5. **Urban areas:**
    6. **Traffic Analysis zones**
h. **Civil division boundaries (Towns, City, Villages, ect):** Created & maintained by D.C./C.O.S.
i. **Public Administrated lands (Parks, Forests, ect.):** Maintained by D.C. Forestry Dept.

j. **Native American lands:** Information available through parcel data.
k. **County boundaries:** Information available through ESRI data DVD's & other resources.
l. **State outline:** Information available through ESRI data DVD's & other resources.
m. **Lake districts:** N/A

12. Critical Infrastructure and Facility Management

a. **Emergency service districts:** Data acquisition is complete and maintenance is ongoing. Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

b. **911 call centers:** Data acquisition is complete and maintenance is ongoing. Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

c. **Fire/Police districts:** Data acquisition is complete and maintenance is ongoing. Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

e. **Fire/Police stations:** Data acquisition is complete and maintenance is ongoing. Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

f. **Hospital facilities:** Data acquisition is complete and maintenance is ongoing. Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

e. **Government facilities:** Data acquisition is complete and maintenance is ongoing. Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

g. **Utilities:** Mapped through the Natural Hazards Mitigation Plan, NWRPC, WEM, & FEMA.

h. **Parks & Recreational Trails:** the County maintains a digital GIS dataset of County Parks.

i. **Transit systems:** None

j. **Bridges, culverts, traffic road signs:** tabular datasets maintained by Highway Department.

k. **Airports:** mapped within the parcel GIS Dataset.

l. **Harbors:** Duluth Harbor data is managed by the U.S. Army Corps of Engineers.

m. **Boat landings:** Digital copies maintained at the Douglas Forestry Dept., City Parks, and WIDNR .

n. **Hazardous materials sites:** the County maintains a digital GIS dataset for the sites

o. **Landfills:** data is kept at the municipality level

13. Database Design and System Implementation

a. **Design Evaluation**: Douglas County currently maintains several land information related databases on a Windows Network. The primary databases are on the Windows Network SQL Server with ArcGIS Server SDE. The County GIS system database is designed to integrate with these systems.

b. **Project Approach**: The Design of the database is based on the *City of Superior/Douglas County Enterprise Geospatial Data Infrastructure*

c. **Time Line:** Based on need and budgets.

d. **Metadata Policies**: Metadata exists for the County GIS datasets; however more documentation is needed to allow further integration with the Windows Network system databases.

e. **Security/Privacy**: Security is maintained by the Information Services Department. The County does not have a specific privacy polices except those required by state and federal law.

f. **Implementation**: The County does not have any plans to redesign its existing database structure. The primary focus is on integrating these existing datasets together.

g. **Data Quality Management**: Each system is designed to maintain security and accuracy.

h. **Needs Assessment**: The County has a Zoning Committee and newly established Land Records Council which looks at existing and future needs.

i. **Data Structure & Format**: New datasets are designed to fit into the *City of Superior/Douglas County Enterprise Geospatial Data Infrastructure.*

j. **GIS Data Model**: *City of Superior/Douglas County Enterprise Geospatial Data Infrastructure.*

k. **Data Dictionary**: The County does not have a data dictionary.

l. **Coding Schema**: New datasets are designed to fit into the existing data architecture.

m. **Transaction Management**: The County tracks transactions with our financial system.

n. **Organization information Flow**: As the County implements new datasets, the County establishes flows to ensure that those datasets can be maintained.

o. **Data Conversion**: All of the County existing data is in an 'open format' which allows for easy conversion.

p. **Ability to integrate with other databases & Information systems**: By following data standards and maintaining the County's data in an 'open format', the County allows for existing and future development of system integration.

F. Public Access

a. **Access**: All County data is available openly on the website: *http://www.ci.superior.wi.us*

b. **Use of 3rd party technology for access:** *http://douglasco.mapping-online.com*

c. **Data Sharing Policies**: The County has policies that govern data sharing and data fees.

d. **Open Access to Data**: Douglas County adheres to the Wisconsin Open Records Law.

e. **Subscription-based or public-facing web services:** County has public-facing web services and no subscription-based for access to County programs.

f. **Customized data:** Available at the cost of time and materials

g. **Internet Access**: City/County GIS web mapping site which provides links to Image Silo (survey documents), Land Shark (ROD doc.), and GCS.

h**. System Security**: The County does have the appropriate security installed to protect its systems.

i. **Privacy Policies**: The County does not have specific privacy policies except those regulated by state or federal law.

j. **Designated fees**: County uses the $2 fee for land information data.

G. <u>Integration and Cooperation</u>

a. **Formal data sharing**: Open data sharing agreements with SLC, SWLP, City of Duluth, NWRPC, ARDC, & WIDNR.

b. **Maintenance agreements:** All departments have access to data.

c. **Cooperative agreements:** City of Superior/Douglas County.

d. **Consortia:** Four-County Northwestern Wisconsin Pictometry Project 2009.

e. **Collaborative arrangements:** Participate in Wisconsin Land Information peer review process.

f. **Statutory relationships:** N/a

1. **What integrative/cooperative relationships would your county like to develop?**
The county would like to develop more data and cost sharing agreement between itself and other public or private entities. The county would pursue integrative and cooperative arrangements with any agency or department that would promote efficiency, utility, compatibility, and/or savings for the parties involved. Douglas County Land Records Department have informal data sharing agreements and a progressive history of data sharing with cooperators including the WIDNR, NRCS and Northwest Regional Planning Commission.

2. **What potential partners and mutual projects does your county plan to pursue?**
The county would like to expand the scope of such local and neighboring agreements by entering into agreements with larger regional entities such as regional utilities, the Department of Natural Resources (DNR), and the Department of Transportation (DOT), and Interstate sharing arrangements.

3. **What data would be shared and used in both of the above?**
The county will continue to freely share data with its municipalities and neighboring counties regarding parcel, centerline, and municipal boundary issues; but would also like to pursue other large-scale efforts. In addition, the county would like to work closer with local utilities, phone companies and emergency services to create a digital addressing system.

4. **How does your county allow for participation and coordinate funding allocations so that all departments benefit from the land information program?**
The Land Records Department funds the GIS web mapping site and ESRI Small Government Enterprise Licensing Agreement (ELA) which allows unlimited seat licensing and access to land information.

5. **How does your county allow for participation so that municipalities and other agencies in the region benefit from land information program?**
The Land Records department has provided training to municipalities on the use of the County's GIS website, Pictometry on line, and EFS (Pictometry software). Numerous presentations have been given to the Towns Association, Fire department, EMS, and other groups inviting participation and involvement.

H. <u>Communication, Education, Training and Facilitated Technical Assistance:</u>

a. **Data Documentation:** The County has developed METADATA for existing datasets.

b. **Resources Available:** The County does have a formal training center.

c. **Identification of Customer Needs**: Needs from internal and external customers are based on user demand and technology changes.

d. **Training:** Training will be provided both internally through the LIO and externally as needed and as funds exist.

e. **Use of Technology to facilitate education and training**: The technology is used to help train the users and public on the program.

f. **Participation in clearinghouse/repository and land info technical assistance listserv.:** Currently participate and will continue.

g. **Education Funds:** The training and education dollars obtained through the Program have been used to send staff to WLIA events.

I. <u>Administrative Standards Not Associated With Foundational Elements</u>

1. The County agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other relevant statutes.

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2. The County agrees to permit the Wisconsin Land Information Board access to books, records and projects for inspection and audit including unannounced audits by the Board until it sunsets.

3. The County agrees to complete the Annual WLIP Survey should the program continue.

4. The County agrees to update the plan every 5 years should the program continue.

5. Development and implementation of an acceptable Plan confers certain benefits on local government within a County, including continued eligibility for Program funding. A self-approving peer review process will be used to assess Plan acceptability by the land information community.

APPENDIX

A. Abbreviations	**Definition**
COS	City of Superior
CSM	Certified Survey Map
DC	Douglas County
DOP	Digital Orthophotography
DTA	Duluth Transit Authority
DTM	Digital Terrain Model
FEMA	Federal Emergency Management Agency
FGDC	Federal Geographic Data Committee
GIS	Geographic Information System
GPS	Global Positioning System
IMS	Imaging system
LIO	Land Information Officer
LIS	Land Information System
LUGs	Local Units of Government
MSAG	Master Street Address Guide
NGS	National Geodetic Survey
NRCS	Natural Resource Conservation Service
PIN	Parcel Identification Number
PLSS	Public Land Survey System
POWTS	Private Onsite Waste Treatment System
RPC	Regional Planning Commission
USGS	United States Geologic Survey
WEM	Wisconsin Emergency Management
WDNR	Wisconsin Department of Natural Resources
WDOA	Wisconsin Department of Administration
WDOR	Wisconsin Department of Revenue
WDOT	Wisconsin Department of Transportation
WLIA	Wisconsin Land Information Association
WLIP	Wisconsin Land Information Program