

# Land Records Modernization Plan Green County, Wisconsin

Copies are available from the  
Green County Treasurer's Office  
1016 16<sup>th</sup> Avenue, Monroe, WI 53566

# **I. Executive Summary**

## **A. Identification and contact information**

### **Green County**

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## **B. Participants in the Planning Process**

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### ***Department Representatives:***

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### C. Summary

This document will update the Green County Land Information Plan from 2005 as required by the Wisconsin Land Information Program. The purpose of the plan is to describe land records modernization goals and objectives. The plan is considered an ever-changing document and it is the intention of the County to review and modify as necessary so that it will remain reflective of the current and future County projects.

Green County has benefited greatly from the Wisconsin Land Information Program and will continue to maintain and enhance current projects and develop further projects with maximum benefits to both government entities and the general public. This plan will layout the strategy for the future growth of land information in our county. Significant effort will be placed on education, cooperation, coordination and partnering to allow land records to grow from data collection and project designs into a tool to be utilized in making decisions effecting the county, communities, and its citizens.

### D. Website Information

The website can be accessed through the Green County web page at [www.co.green.wi.gov](http://www.co.green.wi.gov) . Listed under quick links are Tax Roll Information and Map Viewer.

### E. Land Information websites within the county

Below are listed municipalities with websites that list their Committees that deal with Land Division, Ordinances, some have assessment information.

Town of Albany . [www.townofalbany.com](http://www.townofalbany.com)

Town of Brooklyn - [www.tn.brooklyn-green.wi.gov](http://www.tn.brooklyn-green.wi.gov)

Town of Decatur . [www.townofdecatour.com](http://www.townofdecatour.com)

Town of Exeter - [www.townofexeter.com](http://www.townofexeter.com)

Town of Mt. Pleasant - is [www.townofmtpleasantwi.com](http://www.townofmtpleasantwi.com)

Town of New Glarus - <http://www.tn.newglarus.wi.gov/>

Village of Albany . [www.albanywi.org](http://www.albanywi.org)

Village of Belleville - <http://www.bellevillewi.org/>

Village of Brooklyn - [www.brooklynwi.gov](http://www.brooklynwi.gov)

Village of Browntown . [www.browntown.us](http://www.browntown.us)

Village of Monticello - <http://www.greencountyspotlight.com/monticello.aspx>

Village of New Glarus - [www.newglarusvillage.com](http://www.newglarusvillage.com)

City of Brodhead - [www.cityofbrodheadwi.us/](http://www.cityofbrodheadwi.us/)

City of Monroe - [www.cityofmonroe.org](http://www.cityofmonroe.org)

## II. LAND INFORMATION PLAN

### A. Goal and Objectives

1. **Goal 1:** The continual overall goal of the Green County land records plan is to provide County personnel and the general public the most current, correct, and accurate land information with minimal effort and resources. The County will continue to ensure the most beneficial use of available funding to achieve this goal. The land information will always be developed within the County's budgetary limits.

**Objective:** Always maintain and update the spatial accuracy of information

- Objective:** Refine workflows and procedures to take advantage of GIS in County Departments who use, develop or maintain spatial data in GIS or other database formats
- Objective:** Ensure all county data can be easily accessed and used in emergency situations.
- Objective:** Integrate information used by county offices to eliminate effort and duplication
- Objective:** Further educate and train County staff and the general public in the proper use of GIS technologies and spatial data
- Objective:** Improve inter-governmental cooperation by assisting other local units of government with data development and maintenance
- Objective:** Continue to improve Internet accessibility to land records information
- Objective:** Continue data migration to current GIS standards, including the improvement of current database formats or content to support specialized & multi-user GIS data sets
- Objective:** Expand use of GIS server as a central data repository for all spatial information at the County level, and improve land information communication systems

**Goal 2:** Enhance use of data to support decision making and analysis methodologies.

**Objective:** Build, maintain, and/or refine GIS data required to meet Departmental business objectives.

- Update the current road centerline data. This includes cross referencing with 2010 aerial photo.
- Enhancement of Addressing and other data in support of emergency service needs.
- Continue to work with specialized agencies that define district boundaries within the County to ensure accuracy and benefits to these agencies, such as Fire, EMS, School Districts, Sanitary, Drainage and Lake Districts.
- Continue to integrate data useful to the county highway department, such as, route networking for solid waste and snow removal.
- Integrate Zoning GIS data with everyday workflows.
- Support Land Conservation departments data needs, including data required for farmland preservation and NR 151.
- Continue to seek out and incorporate data developed from other County, Local and State agencies, and provide data back to any agencies upon request.

**Objective:** Integrate existing applications to take advantage of existing data.

- Pavement Management system
- Road centerline painting
- Zoning permits
- Sign Management system
- Document imaging system

**Goal 3:** Improve spatial accuracy currently available to data to support a broader range of activities.

**Objective:** Participate in multi-county orthophoto consortium to obtain improved photography for both rural and urban areas in the County.

**Objective:** Continually improve the base map the County's GIS is built on by integrating Surveyed PLSS corners and other high quality control from internal and external sources.

2. Green County achieves high quality land information by using current GIS and database technology. The technology always supports the county's land information, and general information technology goals, mission, vision, and strategies. The County's GIS resides in an ESRI workgroup SDE stored in Microsoft's SQL Express. It is accessed, used, and maintained by ESRI's ArcGIS Desktop software. The county provides general web based GIS applications to the general public as well as specific departmental web based GIS applications. The county maintains and supports land information data required by applications that are not GIS specific.

All county land information data is spatially defined by the Green County projection of the Wisconsin Coordinate Reference System. The public typically accesses the data through the various web based GIS applications. When it is formally requested, the most current version, at the time of the request is delivered. It is always delivered in common data types that meet industry standards. All County Land Information Goals and objectives are achieved with budgeted resources and grants provide by the Wisconsin Land information Program.

## **B. Progress Report on Ongoing Activities and Completed Projects**

Green County has accomplished many of the goals stated in its 2005 land information plan. During the last five years the county has improved its land information accessibility greatly. The first step was to convert all county parcel data from a CAD based environment to an ESRI geodatabase. It was then combined with GIS data from other county, local and state sources. The county then made the geodatabase accessible to all county departments within its network infrastructure. This was better accomplished through the implementation of an ESRI workgroup SDE in SQL Express. Finally the county implemented a GIS server to better deliver GIS resources to all county departments within its network infrastructure.

Since 2005 every Green County staff with a need for land information was given a training opportunity for any application that gave them the ability to use such information. The Real Property lister was trained to create and update parcel boundary and other GIS changes using ESRI ArcGIS Desktop, specifically ArcMap. The Treasurer trained users on the new Land Records System for maintaining tabular tax parcel data. The Register of deeds trained users of the updated TriMin document image reference and retrieval software. The county continually sought opportunities to make personal and its public aware of the benefits of land information. Interested parties were educated to the best possible extent whenever possible.

An important goal of the 2005 Green county land information plan was to develop procedures and change workflows. Their objective was to better integrate the use of land information within every county department whenever possible. This was partially achieved through general education, but also through setting up documented workflows that require multi-departmental communication and action. For example, when a new address is issued through the zoning department, the sheriff's department is made aware, which then notifies the county property lister. This provides a simple check to make sure the address is incorporated into all separate sources identically. Land information data updates continue to become a part of every departmental work flow, especially as more agencies see the benefit to such data and create their own need for it.

Green County understands that land information is continually changing. It understands that this is because of technological advancements, expanded use and the simple fact that information is always changing. The county knows that as goals from previous land information plans are met the demand for the resulting information will increase, and thus the demand to stay current in both data and technology will also increase. Green County took part in the 2005 Wisconsin Regional Orthophoto Consortium and is participating in it again in 2010, because of the importance for current ground information and a higher quality image created with current technology.

## C. New Initiatives

### 1. Proposed Projects

- Proposed Project 1: Integrate GIS information more directly with departmental software that uses land information.
- Proposed Project 2: Migrate current web based GIS applications to modern GIS and Web platforms.
- Proposed Project 3: Expand use of web delivered GIS resources for focused, specific departmental use.
- Proposed Project 4: Enhance data used by Emergency Management and the Sheriff's department for 911 dispatching and record keeping.
- Proposed Project 5: Obtain improved 2010 aerial photography by participating in WROC to, and LiDAR data from CBDG funding for flood mapping.
- Proposed Project 6: Improve land information base map by integrating high quality control coordinates into existing GIS.
- Proposed Project 7: Continue to educate all county departments on the benefit, creation and use of land information.

### 2. Assistance Requested

- a. Green County staff subscribe to the land information technical assistance e-mail listserv. They also participate in professional organizations including the Wisconsin Land Information Association, the ESRI Wisconsin Users Group, the Wisconsin Treasurers Association, the Land Information Officer's Network, the Wisconsin Register of Deeds Association, and the Wisconsin Real Property Listers Association. The County staff that is required to use and maintain land information will continually receive training to ensure they are using the most effective solution within current technological capabilities.
- b. Green County uses multiple funding sources to support its Land Information program. The primary source is through retained fees. Funding from various grant sources, such as CDBG funding for LiDAR, has proved quite useful as well. For the last three years Green County has used base budget funding from the Wisconsin Land Information Program to pay for specific projects. The County generates revenue for its land information through subscription service access to a high functionality GIS Web Viewer and plans to continue to do so. It will also begin selling documents through a web access system. Occasionally, the County has used tax levy dollars. Typically it is only for large expenditures, such as the purchase of an enterprise Land Records application, which serves multiple county departments. The Green County Board and its Land Information Committee has always supported the County's cost-conscious efforts to improve its land information.
- c. Green County maintains multiple internet accessible GIS applications, including one that is for the general public. The County has redeveloped it to utilize current web technology. It will be easier to use, and have some additional functionality. The fee based subscription website will eventually be updated as well. The county is also implementing a tabular land information web portal. It will integrate with the public GIS application to provide a map viewer portion to

the high level tabular search capability. The County will eventually utilize its GIS server to deliver its GIS resources over the internet.

- d. Green County plans on participating in the statewide GIS repository when it becomes available. However, if the statewide GIS repository's distribution policy is dramatically different from the County's, the Green County board may have to approve the County's participation.
- e. Green County relies heavily on assistance from outside consultants in the advancement of its land information. The County always selects vendors with the appropriate qualifications while ensuring the costs are fair to the county.

#### **D. Custodial Responsibilities.**

Unless otherwise noted, custodial authority comes from Green County

##### **Register of Deeds Office**

- Maintain deeds, mortgages, plats, certified survey maps and all other associated records (§59.43)
- Maintain a record index (§59.43)
- Maintain Grantor/Grantee indexing system (§59.43)
- Maintain the monument record sheets on the PLSS corners of the county
- Maintain survey maps and records performed by surveyors, past and present (§59.43)

##### **Zoning Department**

- Maintain private sanitary permits, plans and soil tests (NR812)
- Maintain land use plans, conditional use permits and land use variance permits
- Maintain flood plain maps, zone district maps for unincorporated areas in the county
- Maintain DNR wetland maps
- Maintain zoning & building permits

##### **County Highway Department**

- Maintain highway right of way plans and WI-DOT construction plans
- Maintain Bridge Maintenance etc..

##### **County Treasurer**

- Maintain tax information for all parcels (§59.25)
- Maintain database of descriptions and ownership for all parcels of property in the county as well as the unique parcel numbers (§70.09)
- Maintain all assessment and tax rate data (§70.09)
- Maintain information on school district and other special district codes (§59.25)
- Maintain survey maps and information provided to the county

##### **Land Conservation Department**

- Maintain soils information, including maps (USDA permanent)
- Maintain water quality information (§281 & NR120)
- Maintain county land conservation plans and activities (USDA permanent)

##### **County Clerk**

- Maintain Supervisory District Maps (§)

##### **Land Information Office**

- Maintain mapping for the Green County Drainage District Board per agreement

- Maintain mapping for the Fire and EMS District
- Maintain data for the uploads to the Spillman Software for Sheriff's Department
- Maintain digital orthophotos and related vector information

2. No additional responsibilities are sought at this time.
3. The County will consider any request for custodial responsibility and will evaluate each request based on available and required resources, ability for integration with other data sets, and conformance with the Green County Land Records Modernization Plan.

## **E. Framework Data, System Implementation and Statewide Standards.**

### **1. Geographic Positioning Reference Frameworks**

- a. Green County will continue to compile a high quality control network from remonumented section corners, observed GPS and other sources that meet the National Standard for Spatial Data Accuracy.
- b. In 2008 Green County passed an ordinance that all remonumented section corners include coordinates in the Green County Projection of the Wisconsin Coordinate Reference System. The county PLSS lines are continually updated, along with parcel, municipal, and other coincident boundary as control is added. The PLSS Sections are populated with Town, Range, Section, Municipal ID number, Range directional code, and quarter-quarter code to meet the WLIA PLSS database definitions standard.

### **2. Orthoimagery and Georeferenced Image Base Data**

- a. Green County's road centerline and hydrography data layers were created in conjunction with the 2005 digital orthophoto, and will be verified against the new 2010 aerial photo.
- b. Green County acquired 18" black and white imagery as a member of the 2005 Wisconsin Regional Orthophotography Consortium (WROC). The County is participating in the 2010 WROC and is acquiring 12" color imagery. The County regularly uses multiple years of freely available imagery from the USDA National Aerial Imagery Program, made available by the WisconsinView program. No municipalities in Green County participated in the 2010 WROC to acquire higher resolution imagery, but some did participate with a higher resolution in 2005 WROC.
- c. Green County does not maintain any digital raster graphic. The County does use the DRGs maintain by the Wisconsin Department of Natural Resources.
- d. Green County rarely uses satellite imagery, but if it does it is from non-county sources.
- e. Green County does not use oblique aerial imagery.
- f. Green County has archived historical aerial imagery that was created prior to 2005.

### **3. Elevation Data Products and Topographic Base Data**

- a. The County does not maintain a Digital Elevation Model, but will after it receives LiDAR data made possible from the Community Development Block Grant.

- b. The County does not maintain a Digital terrain Model, but will after it receives LiDAR data made possible from the Community Development Block Grant.
- c. The County does not maintain a Triangulated irregular network, but will after it receives LiDAR data made possible from the Community Development Block Grant.
- d. The County has traditionally only stored 10qinterval contour line data, but hopes to increase that to 2qafter it receives LiDAR data made possible from the Community Development Block Grant.
- e. Green County will soon be delivered LiDAR data made possible from the Community Development Block Grant.
- f. Green county does not maintain IFSAR data

#### **4. Parcel Mapping**

- a. Green County prepares parcel property maps that refer to the public land survey system. They are suitable for use by local governmental units for accurate title boundary line, but not land survey line information. These maps include all mandatory features for reference maps and many requirements of cadastral maps, as described in the March 1999 WLIA Digital parcel Mapping Data Content Standards. The Parcel boundaries are digitized by using COGO data entry methods from Plat Maps, CSMq and descriptions in property transfers. Initial parcel mapping is complete and maintenance is ongoing. Unique parcel numbers are assigned by the County Property Lister.
- b. Whenever any land information is created, it is digitized using the most accurate possible information at hand.
- c. The Parcel dataset is spatially defined in the Green County projection of the Wisconsin County Coordinate Reference.
- d. Green County does not use the WLIA Parcel Geo-Locator standard for its parcel numbers. The County Parcel number follows section 5 of the standard to create non-graphical system, and does not have plans to change to a graphical system, but has the ability to do so, if necessary.

#### **5. Parcel Administration and Assessment Information**

- a. Green county has maintains a land information system that integrates all facets of tax parcel boundary information maintained in its GIS. As stated in section 4-a, the Parcel boundaries are digitized by using COGO data entry methods from Plat Maps, CSMq and descriptions in property transfers. These descriptions are always referenced to the U.S. public land survey, but their parcel identifier are not.
- b. Green County regularly links all information from its Tax parcel database with the parcel boundaries stored in GIS based on parcel identifiers. This information Includes, but is not limited to taxes, property address, mailing address, property owner(s), legal descriptions, document, volume and page numbers. The county continues to make this information accessible to departments that find this information useful. This information also displays on all web based GIS applications, in an effort to keep every available source of land information as current as possible.

Green County continues to expand its document imaging software to make official documents accessible to all county departments. The County recently upgraded its system to utilize a web based application that can be used by any computer within the county network. It will be expanded to allow the search and purchase of documents to the general public via the internet.

Green County utilizes a document indexing system for indexing real estate transactions. This system contains features that provide information to various other systems such as assessments for easy input. Green County also utilizes the Wisconsin Electronic Real Estate Transfer Form Local Government access site in order to input transaction data for parcels requiring an electronic transfer form. This site also allows historical data research.

Green County only digitizes easements and restrictions when they are explicitly requested to be mapped. However, all easements can be searched and delivered from the Register of Deeds office through its document management system.

Green County maintains the exempt status of parcels in its tax parcel database.

Green County only uses a ZIP Code boundary dataset to support its E911 dispatching software. The boundaries we delineated from general information received from county post-masters.

Assessment class - The Wisconsin Department of Revenue assessment classifications are included as a part of the parcel assessment database and are available online.

Public lands . Green County maintains a database and spatial data regarding public lands and private lands with public access. Each year, a paper map of public access lands is created for sale for the general public.

Liens . Green County utilizes a tract index which allows for consumers to search for specific liens as they relate to parcels.

Evidence of Title- Because Wisconsin is not a Torrens Registration state, Green County does not provide certificates for evidence of title. Documents such as deeds are available for viewing and purchase.

Green County uses a relational database system for parcel administrative duties. The system has the ability to track information by Section, Town, Range and municipality number. Other information fields include ownership and billing information, legal descriptions, valuations, and site address. The County has the ability to export this data to meet most requirements. When integrated with the parcel and PLSS GIS data, this system can generate a WLIB style parcel number.

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

The County maintains a road centerline data layer originally derived from 2005 orthoimagery. The centerlines include road names and address ranges suitable for accurate geocoding and support the E911 dispatch system. Functional class is not recorded as a GIS data layer attribute.

The County GIS system supports emergency planning, routing, response and mapping. The GIS Specialist has attended emergency preparedness exercises and participates in the regional DNR wildland fire incident management team. A laptop with GIS software and data is dedicated to the support of emergency management and response.

Site addresses are mapped at driveways and are recorded in the tax and assessment database. The WDNR recently completed structure point and driveway datasets that the County will maintain. The address database is loosely integrated with the Master Street Address Guide.

Bike paths, sidewalks and railways are also mapped. Road rights of way are mapped, but are often poorly documented. Multiple categories of named places and landmarks are mapped.

The datasets and systems described above follow County policy and US Postal Service addressing standards.

## **7. Hydrography, Hydrology and Wetlands Mapping**

The County uses multiple hydrography data sources, including the USGS National Hydrography Dataset, the WDNR 24K Hydrography Geodatabase and a County dataset derived from 2005 orthoimagery. The County uses multiple watershed datasets, including WDNR 24K watersheds and the USDA Natural Resources Conservation Service Watershed Boundary Dataset.

The Green County University of Wisconsin Extension Agriculture Agent is overseeing an investigation of ground water quality and availability using residential water analysis results compiled by the W DNR and University of Wisconsin - Stevens Point. The GIS Specialist and a high school intern are assisting with the project.

The County Health Department provides free water testing to households considered vulnerable to the affects of nitrates in drinking water. Samples are analyzed for a variety of contaminants by the Wisconsin State Laboratory of Hygiene. The results are compiled by the WDNR and mapped by the Wisconsin Division of Public Health.

The County does not maintain maps of contaminants, wetlands, or hydrogeology, but relies on state, federal and university sources when necessary. Wetlands mapping is not done by the County. The County cooperates with the Army Corps of Engineers, the Natural Resources Conservation Service and the WDNR when questions about wetland status arise.

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

The County uses USDA-NRCS soils data. Land cover may be compiled when needed using current orthoimagery and LIDAR data. Forested lands are included in the historic land use datasets. The County uses the WDNR Managed Forest Law / Forest Crop Law and the USGS GAP Analysis Wisconsin Stewardship datasets. The County uses Wisconsin bedrock geology and Green County Pleistocene Geology published by the Wisconsin Geological and Natural History Survey.

The County plans to map non-metallic mining sites and reclaimed areas. This information will be used with a planned permitting application. Documents for registering non-metallic mining can be recorded in the Register of Deeds Office. The County does not maintain datasets describing endangered resources or impacts on the environment but relies on other state and federal sources for the information when necessary.

## **9. Land Use Mapping**

The Green County Comprehensive Plan was completed and adopted in 2006. The Plan includes various maps including: Existing land use, future land use, soil, wetland, floodplain. Each Town, the City of Green, developed their own individual plans. These individual plans

were combined into a County-wide Plan. All of the Plans are being developed pursuant to and in compliance with ss 66.1001. The project was funded by the Dept. of Administration (grant) and Green County. The consultant for the Town and County Comprehensive Plans was the North Central Wisconsin Regional Planning Commission. It is anticipated that each municipality will continue to update their plan as needed and provide the information to the county when requested.

The County uses the WI Department of Revenue Land Use Classification codes in the tax and assessment software and this information is exported for use on the county land records website.

## **10. Zoning Mapping**

- a. Nine towns have adopted county zoning. Zoning maps are being developed and updated as rezoning requests are approved. Green County is in the process of obtaining a permit application program that will link with the county GIS. It is also anticipated that zoning data and/or maps will be available online either through the public access site or through the subscription site.
- b. All 17 towns are under the Green County Shoreland Protection Ordinance. Shoreland zoning maps were originally developed for Green County around 1969-1970. Sensitive environmental areas were zoned as to be essentially unbuildable. Maps are updated to reflect changes to the Ordinance.
- c. Green County adopted new Flood Insurance Rate Maps in May of 2008 and is in the process of requesting an update to those maps after completing a planned LiDAR project. FEMA GIS data layers are used in county mapping when necessary.
- d. Green County does not maintain Environmental corridors data
- e. The Green County Register of Deeds is currently working with Burial Sites Preservation at the Wisconsin Historical Society to catalog each burial site, single and multiple, so they may be mapped in the future. The Register of Deeds has created a list of burial locations that includes parcel numbers which was incorporated into a dataset recently compiled by Wisconsin North Central Region Planning Commission.
- f. Green County does not maintain Archeological sites
- g. Green County does not maintain Historic/cultural sites

## **11. Election and Administrative Boundary System**

- a. Green County maintains supervisory districts and wards. Maps showing districts and address points are printed for use on Election Day at local election sites.
- b. Green County uses state and federal legislative districts as published by the authoritative sources.
- c. Green County does not maintain Utility districts.
- d. Green County maintains a school district data layer derived from tax records.
- e. Green County maintains Tax incremental financing districts in its Tax records.

- f. Green County maintains a very basic ZIP Code boundary dataset to support its E911 software
- g. Green County uses Census geographies as published by the US Census Bureau.
- h. Green County updates civil division boundaries after annexations or other changes are recorded.
- i. Green County does plan to begin maintenance of a public lands dataset in the future.
- j. Green County does not currently identify Native American Lands. There are not any native American lands in the county.
- k. Green County creates its County boundary from its outer parcel boundaries.
- l. Green County uses the state outline dataset published by WDNR.
- m. Lake Districts are identified using the tax roll database and mapped by joining that information to the GIS parcel dataset.

## **12. Critical Infrastructure and Facilities Management**

First responder, fire, police and EMS districts are maintained to support the Sheriff's Department dispatch system. 911 call center service areas and dispatch center locations are not mapped.

The Highway Department maintains a database of bridges, culverts and traffic signs. A data collection system that uses field computers with GPS receivers is being implemented.

The Emergency Management department had hospitals, government facilities, police stations, fire stations, and airports and airfields mapped as part of the recently adopted All Hazards Mitigation Plan. These datasets will be updated and maintained.

Landfills, including those that are no longer in use, are mapped, as are electric transmission lines and an oil pipeline. Parks, recreational trails and boat landings are also mapped

## **13. Database Design and System Implementation**

- a. The County is in the process of redesigning its geodatabase to eliminate redundancy, improve documentation and simplify its organization. The ESRI Land Parcel Data model has been in use but never fully implemented because of its complexity. The County plans to implement parts of the ESRI Local Government data model that suit our needs

The County considers database design issues from an enterprise viewpoint, especially as departments investigate new technologies. Many of these systems overlap in terms of information content so the County is trying to acquire systems that are compatible in as many areas as possible.

- b. The County has changed their approach in the acquisition of new system software to make sure that the new systems are standards compliant, open and can be made to interact with other database systems currently deployed. The County will also work with current legacy system vendors to improve the ability to integrate systems together and with GIS. Changes to the design of the GIS database are being made with County-wide systems integration in mind.

- c. In general, timelines are dependent on budget limitations by various departments. These projects require large efforts and the County has only one IT support person. Consequently the County has relied on consultant assistance for many projects. Two major projects are starting. The Highway department is beginning to use field computers with GPS receivers and cameras to maintain an existing asset management database. The Planning and Zoning department will soon begin to use a permit management system that includes parcel numbers as a key value for integration with other county databases.
- d. The County has developed FGDC compliant metadata for parcels as per WLIB requirements and intends to complete metadata for other data layers in the near future. Most data layers have some metadata.
- e. Green County Management Information Systems maintains the security of most GIS and Land Records systems. The ArcIMS server is maintained by outside vendor. The county computer network is shielded from outside intrusion by a firewall. Green County adheres to the Wisconsin Open Records Law and complies with state statutes for access to restricted records. The county continues to monitor the industry and public concerns related to privacy and data distribution
- f. Although Green County has not developed an implementation strategy, the county determines implementation by user need, workflow, business need and costs. The county performs in-house testing by departments who frequently access land records.
- g. Green County identifies data quality problems through use by various county departments and the public. Errors are reported to the various custodial departments. Error reports are run periodically to identify errors between databases.
- h. The Green County Land Information Council discusses and prioritizes needs. The Council is made up of county departments, county board supervisors and citizen members and are compliance with Act 314. The Land Information Officer is in contact with land records customers on a daily basis to establish or refine user needs. Land information customers include all departments in Green County, state and local government and the public..
- i. GIS datasets are stored in an ESRI Personal SDE geodatabase located on the GIS workstation. Exports from this authoritative database are made available to other users on the County network in ESRI file geodatabase and shapefile format. There are known topological errors in the Green County GIS datasets. The problems are a legacy of the CAD data lineage and low level editing. Topological errors are corrected when they are observed.
- j. Datasets related to land parcels follow elements of the ESRI land parcel data model. Data layers that support the Sheriff's dispatch system are determined by the requirements of the dispatch software. Workflows that support the Sheriff's dispatch system are well documented but documentation of other workflows is scant
- k. The County has a list of all data layers stored in the primary geodatabase that includes schema and metadata information. However, metadata is minimal for many of the data layers.
- l. Green County does not use any Coding Schema
- m. Green County does not maintain any transaction history

- n. Documents that create land information are recorded in the Green County Register of Deeds Office. This data is made available to any department that requests to be included on the land records management systems through public access terminals and available online. Certain data fields are also shared between departments. It is anticipated that Green County will review future land records management software to improve organizational workflow.
- o. GIS data format conversion is performed when necessary. Many formats are supported. Data can be extracted from tabular databases in a variety of formats
- p. The tax roll, GIS, and document databases are well integrated. Key columns are maintained across the databases and joins can be performed when necessary. Databases maintained by single county departments (Highway, Solid Waste, etc.) are less well integrated with the primary land records databases. As these department-specific databases are developed or changed, managers are encouraged to identify and maintain key columns that allow joins to land records data.

## **F. Public Access**

- a. Green County has several on-site public access terminals available to the public for searching land information databases. These terminals are located in the Register of Deeds and Treasurer's office. The County also maintains an internet web site for remote access to property tax information and a web map. We also provide a subscription viewer for a minimal cost that has additional features. It is the hope by the end of the year the County's new Land Information System will have the web portion available for all tax parcel information along with the ability to view and purchase documents from the Register of Deeds office.
- b. Use of 3<sup>rd</sup> party technology is currently being used in the hosting of both Web applications. The County hopes to participate in the GIO Repository when it is available.
- c. The County currently has data sharing agreements in place with most of the municipalities within Green County. We also have agreements in place with the Department of Transportation, Southwest Regional Planning and the Department of Natural Resources. The data is shared free of charge with any governmental unit as long as there is a license agreement and data request filed along with a data sharing agreement.
- d. Green County adheres to the Wisconsin Open Records Law for access to land records. The County has established a base fee structure. Data is made available in its existing format unless a negotiated under a separate agreement to adequately compensate the county for customized services.
- e. The County offers public-facing land records web sites providing real estate documents information, tax and assessment data and a map viewer. A subscription viewer is also offered for a minimal cost and has additional layers of data along with the ability to do queries and sort information.
- f. The County produces customized data and follows a base fee structure, plus labor costs.
- g. Green County would be better served by implementing software design that improves access for people of all abilities. Green County is also planning for compliance with Wisconsin Act 314 to redact any possible social security numbers that may be viewable
- h. Green County contracts with Systems Management Group to maintain the security and back-up systems for all GIS and Land Records servers maintained by Green County. Outside access to the county computer network is shielded from outside intrusion by firewall. Because the land records website is a duplication of the county information, users are not accessing a live database.

The website is considered an additional backup if the house systems were not available.

- i. The County currently does not allow access to information by name on the public website. That may change in the near future as with the purchase of a new Land Information System one of the features allows an opt out option. Green County adheres to the Wisconsin Open Records Law and complies with state statutes regarding the same. The County monitors state and federal legislation regarding privacy and distribution of data. Green County will adhere to Wisconsin Act 314 which requires the social security numbers to not be viewable for documents online.
- j. Use of the \$2 fee designated for land information and housing data Sec. 59.72(5)(b)3. will continue to be used to host our website. In the future it will also be used to maintain the web portal to our new Land Information System. We will continue to maintain and develop additional layers of information.

## **G. Integration and Cooperation**

Wisconsin Administrative Code, Chapter Adm. 47 defines integration as the coordination of land records modernization to ensure that land information can be shared, distributed and used within and between government at all levels, the private sector and citizens. Cooperation is defined as the explicit relationships within and between public agencies, and between public entities and private entities to share land information or collaboratively pursue land records modernization. These cooperative relationships may be formal or informal, a single instance of exchange or an ongoing association.

The County has established data sharing agreements with most of the municipalities within Green County and various State Departments including but not limited to the Department of Transportation and the Department of Natural Resources.

- a. The County currently has data sharing agreements in place with most of the municipalities within Green County. The County has always supported integration and cooperation with activities of municipalities, county offices, other counties and the general public relating to land records modernization.
- b. We have agreements in place with the Department of Transportation, Southwest Regional Planning and the Department of Natural Resources. The data is shared free of charge with any governmental unit as long as there is a license agreement and data request filed along with a data sharing agreement. The County has an agreement with the County Drainage District Board to maintain their maps. We are looking forward to working with and sharing information with area counties and all jurisdictions involved in land use planning. The 2010 Ortho Photo Consortium included participants from the County, State and Private sector organizations.
- c. The County currently has mapping for the school districts based on taxation and have shared that information which they have used to determine bus routes. We would be interested in pursuing additional agreements.
- d. The County participates in the Wisconsin Regional Orthophotography Consortium (WROC). WROC aids the acquisition of high quality and cost effective remote sensing products. Without WROC and the Base Budget Grant the acquisition of these products would be much more expensive and require much more staff time. The County has pursued reciprocal, ongoing data sharing agreements with boarding counties and the State of Illinois, for primarily use in emergency planning and response. In 2011 the County will benefit from a grant from the Community Development Block Grants for the acquisition of LiDAR data which will aid FEMA in emergency situations. The data will be available without charge.
- e. We currently work with the Sheriff's Department in the maintenance of data that is used with the wireless 9-1-1 system and the data uploads for the Spillman

- software. The maintenance of data is a collaboration of effort with the local municipal clerks, the fire district chiefs and the EMS coordinators.
- f. Statutory relationships among counties and state agencies

The Land Information Officer and the GIS Specialist annually contact Departments to ask if the Department have any projects it would like to pursue in the upcoming year. In most cases the data is already available, it's just a matter of making it available in an application that is both easy and informational for the user. One such project was used in the Emergency Management office to help map and maintain flood information that would work easily with the requirements of FEMA. Funding from the Land Information Program has provided the technical support to those departments that use land records. This allows departments to seek specialized software that meets their needs, and for standard GIS project implementations.

Annually the County Treasurer has a meeting with the Municipal Clerks and Treasurers and a part of that meeting an update is given on the County's website normally with a visual demonstration of the tools available. They are notified of additional information that is available via the website. The municipal Clerks and Treasurers have referred their users to the County resources. Many of the Municipal Planning Commissions use the website in the development of their ordinances. The County has held several public informational meetings, including County Board meetings on the availability of the web site along with demonstrations on the various information and additional tools available. These parties and the County have mutually benefited by essentially trying to eliminate redundant data collection activities, thus saving government funds. These activities include but are not limited to orthophotography, specialized equipment sharing and providing updated GIS data upon request.

#### **H. Communication, Education, Training and Facilitated Technical Assistance**

- a. Documentation is available for those processes related to the emergency dispatch system. We are in the process of creating documentation and policies with regard to land records which has come about with the purchase of a new Land Information System. This System will be in place for some time and due to past experience it is the intent to provide the documentation for those future users and creating policies that will need to be continually reviewed.
- b. Training in the use of Land Records systems is available to County staff and the public either on an as-needed basis or through public and informational meetings. There is written instructions provided and personal assistance when necessary. Training in the use of GIS is available when requested. Other resources available are ESRI, WLIA, WRPL, WRDA, LIO and WCTA. As the Land Records System and GIS is an ever growing and never ending project due to development and enhancements so is the education.
- c. Frequent users of land information are invited to participate in evaluating needs. Users are also valuable in assisting with verification review of image and index data. A survey is provided to subscribers to help in determining the needs and expectations of the web site. All Land Information Council meetings are open to the public and are advertised. The County is constantly weighing the needs of the community against costs of various projects to determine where the dollars can be best spent.
- d. We have used our area technical school to provide training to anyone who wished to learn to navigate the county web site upon its inception.
- e. There is no formal development of education and training at this time. Online help is provided for the web mapping sites.
- f. Green County participates in the land information technical assistance

listserv. The County hopes to participate in the state data repository. Green County uses the education and training funds to attend seminars and workshops offered by organizations such as the Wisconsin Land Information Association

**I. Administrative Standards Not Associated With Foundational Element.**

This plan is an agreement between Green County and the Wisconsin Department of Administration (DOA). This agreement is intended to effectuate the objectives of the Program as embodied in the enabling legislation. In order for a plan to be acceptable to the DOA, the DOA and Green County both agree and consent as follows below.

1. The County agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other relevant statutes.
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.
3. The county agrees to complete the GIS Inventory Survey as required annually by WLIP.
4. The County agrees to update the plan every 5 years and in the interim if the plan should change.
5. Development and implementation of an acceptable Plan confers certain benefits on local government within a county, including continued eligibility for Program funding. A voluntary peer review process will be used to assess Plan acceptability by the land information community.