

- 2005 -

# County Land Information Plan Wood County, Wisconsin



Grantor, for a valuable consideration, conveys described real estate in \_\_\_\_\_ WOOD \_\_\_\_\_ C  
"Property") (if more space is needed, please attach addendum  
LOT 2 OF WOOD COUNTY CERTIFIED SURVEY  
(RECORDED IN VOLUME 25 OF SURVEY MAPS  
BEING LOT 18 AND PART OF LOT 17, OF B  
ARBORLAKE ESTATES, TOWN OF GRAND RAPIDS, WOOD COUNTY,  
WISCONSIN.

Prepared By:  
Wood County Planning and Zoning Office  
*Wood County Planning & Zoning Committee*  
(Advisory Committee of the Wood County Land Records Modernization Program)



**I. EXECUTIVE SUMMARY**

**A.** Identify your county and the name of the person completing this form.

**County of Wood**

Jason R. Grueneberg  
Planner/Land Information Officer  
Planning & Zoning Office  
400 Market Street  
Wisconsin Rapids, WI 54494  
P: 715.421.8478  
F: 715.421.8599  
Email: [jgrueneberg@co.wood.wi.us](mailto:jgrueneberg@co.wood.wi.us)  
Web site: [www.co.wood.wi.us](http://www.co.wood.wi.us)

**B.** Identify those who participated in the process of preparing the Plan. List organizational affiliations, names, addresses and phone numbers of designated contact person(s) for this Plan.

Plan prepared by: Jason R. Grueneberg, Planner/Land Information Officer

Land Records Committee: Hilde Henkel, Chairperson  
Richard Polansky, Secretary  
Gary Allworden  
Paul R. Weimer  
Wayne Gardner

Land Records Advisory Group: Ron Arendt, Director, Park Department  
Wayne Basler, County Surveyor  
John Erickson, Real Property Lister  
Bill Grandzielwski, Director, Information Systems  
Rene' Krause, Register of Deeds  
Steve Kreuser, Director, Emergency Management  
Peter Manley, UW Extension  
Gary Popelka, Director, Planning & Zoning  
Jerry Storke, Land Conservationist  
Frederick Schubert, County Forester

C. Provide a concise summary of this Plan not exceeding one page.

Wood County is part of the Wisconsin Land Information Program and land records modernization efforts are coordinated by the County Land Information Office. The program is subject to § 59.72 and the Wood County Planning & Zoning Committee provides oversight for land records modernization projects and expenditures. Because Wood County is a part of the WLIP, it is required to have an adopted County Land Information Plan. This plan is to be updated at least every 5 years or more often if necessary.

The purpose of this plan is to identify areas where land records modernization can be pursued in an effort to attain the program goals. Projects are intended to benefit operations by improving the way that land records are stored, maintained, retrieved, and used. The County is committed to sharing the benefits of modernized land records with all levels of government, customers, and agencies.

The goals of the Land Records Modernization Program in Wood County are to **eliminate or reduce redundancy** through the coordination and modernization of existing services provided by and between departments and agencies participating in the program; **Develop an efficient delivery system for products and services** offered to the public, and; **Improve the quality of products and services** offered to the public. Ways of achieving these goals are identified in the following section of this plan.

The plan is intended to outline projects that should be considered over the next 5 years. Although aggressive, it is not impossible to accomplish all of the new initiatives outlined, if projects are approached through cost-sharing and cooperative efforts. Successful implementation is contingent on funding made possible through retained fees and contribution-based grant funds of the WLIP. Historically the Wood County Land Records Modernization Program has operated almost entirely from funds generated by recorded documents in the County Register of Deeds Office. The allocation of tax-levied funds for projects would greatly improve the successful implementation of this plan, and in many cases the costs would be offset by savings to County operations. This plan should be referenced often and updated as necessary to reflect changing needs and opportunities in land records modernization.

## II. LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

### A. Goals, Objectives and Policies

1. State the goals and objectives of the County relating to the horizontal and vertical integration of land information and systems among users of land information in Wisconsin.

The following goals and objectives are continually referenced to ensure that the Land Records Program stays on track and funds are being expended appropriately.

**GOAL: Eliminate or reduce redundancy** through the coordination and modernization of existing services provided by and between departments and agencies participating in the Wood County Land Records Modernization Program.

**Objective:** Limit stewardship of data sets and map layers to their respective departments.

- Encourage and facilitate GIS software training so that departments can maintain their own data sets.
- Educate departments on metadata and promote the maintenance of it.
- Maintain a networked GIS server where data sets and map layers are maintained only by the appropriate departments but can be accessed by any department with need for the data.
- Implement document imaging systems in departments with land records data to facilitate information sharing.
- Develop a security system to maintain data integrity.

**Objective:** Coordinate Wood County efforts with those of local municipalities, private enterprises, and state and federal agencies.

- Develop data sharing agreements both formal and informal to encourage the exchange of data when possible.
- Work with agencies at all governmental levels to focus efforts to improve data that can be used to meet the needs of all users, rather than maintaining proprietary data sets or systems.
- Increase awareness of County land records modernization efforts among municipalities contained in Wood County.

**Objective:** Foster communication among departments that rely on land information.

- Continue to conduct regular meetings of the Wood County ArcView User Group.
- Allocate land records retained fees to projects that foster cooperative efforts among departments.
- Conduct regular review of workflow to determine if improvements will reduce redundancies and yield efficiencies among departments.

**GOAL: Develop an efficient delivery system for products and services offered to the public.**

**Objective:** Simplify departmental and public access to map and tabular information available from various departments.

- Maintain the comprehensive document indexing system capable of managing all aspects of the Register of Deeds document management routine.
- Implement departmental document imaging systems that provide secure interdepartmental access to needed information, thus minimizing staff time related to data collection or analysis.
- Make available public access terminals for customers to query and view land records.
- Coordinate meetings of the Land Records Advisory Committee comprised of department representatives to share information and ideas, and to recommend policy changes in regards to the administration of the Land Records Modernization Program.
- Maintain the networked GIS in which data sets and map layers are updated **only** by the appropriate departments but can be accessed by any department with need for the data.
- Develop the systems and data necessary to produce up-to-date hardcopy maps for the public in a real-time situation.

**Objective:** Minimize staff time necessary for data gathering and analysis.

- Provide ongoing, in-house training for staff directly involved with the use of any system purchased.
- Develop standardized map and data products that are available for over-the-counter purchase.
- Ensure that any GIS or data management package purchased is flexible enough to accept various import file formats, and sophisticated enough to allow for detailed overlay analysis of data layers.

**Objective:** Minimize the need for Courthouse visitors to search from department to department for needed information.

- Develop a system for information access that allows viewing of interdepartmental information from any terminal in the Courthouse.
- Coordinate working relationships among departments that foster cooperation and sharing of data when possible.

**Objective:** Minimize the need for customers to travel to the Courthouse for products and services.

- Continue to maintain and improve the Wood County ArcIMS, web-based application that serves tax parcel data to anyone with a computer and internet connection.
- Continue to evaluate the need for creating additional web-based applications that allow customers to query and view land-based records.
- Allow map and data requests to be completed in digital formats.

**GOAL: Improve the quality of products and services** offered to the public.

**Objective:** Improve the accuracy of land ownership information, including both tabular and map data.

- Maintain the County geodetic control network and continue the remonumenting of section corners with ties to the control network.
- Continue to improve the availability of land records through web-based applications.
- Develop and maintain digital backups of all land records information to protect against catastrophic loss of hardcopy maps and digital data.
- Develop maintenance schedules that encourage timely updates of data.
- Provide metadata with all data that is distributed and shared.
- Encourage quality control processes that aid in the identification of tabular and mapping data entry errors.

**Objective:** Improve the accuracy of the decision making process using the County GIS.

- Promote the use of GIS with other land records as a reliable and functional decision-making tool.
  - Develop a networked GIS package to provide real time analysis of relational land-based information.
  - Provide the ability to view spatial relationships of multiple data sets thus promoting a better understanding of geographic data sets and their relationship to one another.
  - Educate end users on the data that is available and how it could be used to help them in analysis of the issue they are involved with.
- a. **Data Acquisition from state or local sources.** Most of the core data that the County relies on, and uses on a daily basis is created and maintained internally. Wood County does use and share data with surrounding counties when working on projects that are regional in nature. General data such as county boundaries, state outlines, etc. are acquired from state sources at times. Census data and the associated mapping is acquired at intervals and is made available for use to departments and customers.
  - b. **Needed data.** There is currently no data that the County is aware exists and is not able to acquire. Current issues tend to focus on data that no one at any level has available, and the County would like to develop. Such data sets include digital elevation models and planimetric mapping, among others.
  - c. **Standard Industry Format.** The County uses ESRI software that works with a variety of data formats that can be used by most customers with little or no export or reconversions. ESRI is the predominate GIS software used in the state and nation and the wide use of the software makes its appealing. Because of the popularity of the software, there is a large user support base and data is easily exchanged among ESRI users.
  - d. **Geographically referencing data.** Currently most County data is in State Plane Coordinates which is a Lambert Conformal Conic projection for the Central Zone. The horizontal datum that is being used at this time is the North American Datum of 1927(NAD)

27). The geographical reference that is used is common and data can be easily projected to and from this coordinate system.

**2. Description of the County's operating system environment and database design supporting the county's goals and objectives relating to land information.**

The Wood County Systems Department is a service-oriented organization dedicated to supporting any systems necessary to make county government more efficient. The department staff currently consists of ten employees, including 4 technical staff, 6 application support staff, and 1 department head.

The County datacenter includes over 35 servers, mostly running Windows 2000, which provide a wide variety of services. These include file and print servers, application servers, database servers, web servers, internet access servers, and systems management servers, among others. Out of this datacenter services are provided to the Courthouse and information systems are made available to 9 other County sites.

The Systems Department is committed to supporting all activities of the Land Records Modernization Program and has been a reliable contributor to system development and support. In recent years the department has taken over the tasks of hardware purchasing, software installation, network administration, data security and backup.

Starting in 2004, the Systems Department invested staff, training, and resources to develop, maintain and improve the County ArcIMS site that makes tax parcel mapping and data available to the public. The future development and growth of ArcIMS internet mapping applications will be a combined effort of systems and land records staff.

**B. Progress Report on Ongoing Activities.**

The first 6 years of the Land Records Modernization Program (1992 – 1998) focused on establishing the foundation on which much of the program's future would be built off of. The subsequent 7 years seemed to have many more quantifiable achievements. The achievements can be attributed to the following: a solid land records foundation, improvements in technology, contribution-based grant funding available to fund LTE and intern staff, more acceptance of GIS and land records technology at the County/local level, and more County departments utilizing GIS for daily functions.

Most of the projects identified in the 1998 plan as new initiatives have been completed and new projects have been identified as new initiatives in Section C to further land records modernization in Wood County. Although the new initiatives have been given timeframes, their completion is subject to the level of funding made available by the WLIP for contribution-based grants and strategic initiative grants.

Since the inception of the Land Records Modernization Program, the goals have remained relatively the same, however the objectives have continually been updated as a means to achieve the goals. The objectives have changed from a focus on technical issues and data creation in the early years of the program to reach the program goals, to maintaining, sharing, publishing, and

utilizing data for decision making in recent years. In summary, the earlier years were dedicated to building data, and now the focus is on maintaining and sharing data and using it as a decision making tool.

**The following projects were implemented as a result of the 1998 Wood County Land Information Plan.**

**Utilization for comprehensive planning.** Since § 66.1001 became law under the 1999 state biennium budget, a great deal of time and effort has been put into preparing the County GIS so that it could be used in the comprehensive planning process. With the data layers in place prior to commencement of comprehensive planning, staff will not have to dedicate time to create and improve data during the planning process, which will allow them to focus on using the data for analysis and inclusion in the plan.

**Creation and maintenance of parcel mapping.** Of all of the mapping layers that the County maintains, parcel mapping receives the most time and attention. Accurate parcel ownership mapping is one of the most often requested mapping layers, and is used as the framework for many other GIS data layers. In the past few years many improvements have been made to the parcel layers to improve accuracy of the parcel model. Currently the entire County excluding the city of Wisconsin Rapids is digitally mapped. Additional parcel mapping improvements will take place over the next few years in the remote areas of the county.

**Creation of building number index maps.** In the past few years digital building number index maps have been modernized and are now used in the County GIS. From the building number database address points can be merged with parcel maps, and parcel maps can now be queried for the first time, by the assigned building number of a property, rather than just owner tax bill address. The ability to query by the building number of a property will save county staff time and also improve the quality of customer service.

**Park Mapping.** In recent years features of County parks have been captured with GPS and located with aerial photography. The features have been included in inventory maps used by park and forestry staff for planning and maintenance. In addition maps are created for the customers of the County parks and forestlands. Maps for customers are available at many of the park locations, and also posted on the County website.

**ArcIMS Web Application Development.** Wood County has developed an internet mapping application that is currently available for use by the general public. The application is used to view parcel mapping and underlying aerial photography. Searches for information can be completed by location addresses and tax parcel identification number. The interactive mapping interface also makes parcel viewing possible by panning and zooming to the desired location, and selecting on parcels to extract tax database information. The development of this web site has improved the usability and accessibility of tax mapping and data by county staff and the general public.

**Land Use Mapping.** Wood County created detailed land use in preparation for countywide comprehensive planning that is scheduled for completion in 2010. The compilation of land use was made possible through WLIP contribution-based grant funding.

**Implementation of document imaging.** In 1999 the Register of Deeds Office successfully implemented document imaging. Imaging has improved the workflow in the department allowing increases in the number of documents recorded to be handled without increasing staff. Document imaging has also increased the efficiency of document searches and retrieval.

**Soils mapping.** Digital soils mapping was completed as a WLIP statewide strategic initiative. This is a significant accomplishment and a much needed addition to the Wood County GIS. Soils mapping is frequently referenced in land conservation planning, in community land use planning, and when determining suitability of land for future development.

**GIS software training program.** Success of modernizing land records in Wood County is dependant on participation of departments, and their ability to integrate modernized records into their daily workflow. In order for to effectively and efficiently use a GIS, department staff need to have some working knowledge of how to use it to meet their needs.

From 2000 to 2003 eighteen County employees took part in training conducted by the land information officer. The training has contributed to the successful deployment of GIS to seven County departments that have integrated GIS into their daily tasks and projects.

### **C. New Initiatives.**

**1. Proposed projects.** Highlight specific activities that the county proposes to initiate to enable land information to be readily translatable, retrievable, and geographically referenced for use by any level of governmental unit and the public. Identify specific budget information, timeframes, staffing and other pertinent data associated with these initiatives.

Timeline: Ongoing

**Mapping and data requests.** Numerous requests for mapping and data occur on a daily basis and the County should maintain its ability to complete requests in a timely manner.

Timeline: Ongoing

**Awareness of land records modernization.** Land records modernization efforts have improved the usability and accessibility of records that the County is responsible for maintaining. Modernization of land records has enabled them to be more easily accessed and improved the overall usability of the records.

Timeline: Ongoing

**Assist County departments utilizing GIS.** The Wood County GIS is structured so that departments can access and use data to meet their specific needs. Staff other than land records staff are casual GIS users that have limited background in GIS, and do not use GIS on an extensive basis. The land records staff will continue to assist departments with basic informal training and general GIS support.

Timeline: Ongoing

**Parcel mapping completion/maintenance.** Although most of the County is mapped at this time, less densely populated areas will need to be improved as better section control becomes available. All areas of the County will receive maintenance and updates as parcel transactions and land subdivisions take place. Parcel mapping and database updates will be coordinated so that accurate linking between these files can be maintained.

Timeline: Ongoing

**Convert mapping data to geodatabases.** Convert all data that is in shape file or coverage format to geodatabases. As part of the project, data structure will be reviewed to ensure design considers the added functionality of the geodatabase as it is used in the ArcGIS suite of software. The conversion of data will likely affect all of the County departments that use GIS. Some of the departments using ArcView 3.x will need to purchase updated version of ArcGIS, or geodatabases may need to be exported into formats for departments to use in ArcView 3.x.

Timeline: 2006-2007

**Addressing.** Address ranges exist for all street centerlines in the county. The entire County excluding, the cities of Marshfield and Wisconsin Rapids have building number point coverages. Both the centerline file and the building number files are very accurate, but some problem areas still need to be reviewed as well as a system of maintaining these files established. BNI and centerline files are updated for a variety of applications, but most importantly, they are used for E911 dispatch in the Sheriff's Department.

Timeline: Ongoing

**Training program.** Seven County departments use GIS on a daily basis for viewing maps and data and maintaining data sets. Changes in staff and technology require that GIS training be done on a continuing basis. Challenges in implementing training are related to cost and scheduling. Some anticipated ways of providing training is through online courses, and onsite training opportunities. Informal means of training through the sharing of ideas and support of other GIS users can and has been done through user groups.

Timeline: Ongoing

**Staffing.** The Wood County Land Records Modernization Program has relied on limited-term employee staff in recent years to complete specific mapping projects. Most LTE activity has been funded through the WLIP contribution-based grant program. With the uncertainty of the future of contribution-based grant awards, funding of LTE's to complete specific projects will need to be reconsidered. The future of land records staff should be continually reviewed to ensure that it is sufficient to meet the needs of the County.

Timeline: Ongoing

**Update Wood County resource map.** The current County base map that is given to the public by a variety of County departments dates back to 1996. Although the map is still functional, in many areas it is outdated, and we are running out of printed copies. A new resource map will be created to replace the 1996 edition. It will be distributed not only for locational purposes, but also to promote the many park and recreation opportunities in the County.

Timeline: 2005

**ArcIMS web application development.** Wood County reached a milestone in early 2005 with the release of its GIS parcel search application. The GIS based search mechanism was a combined effort of land records and systems staff, and assistance of a consultant. Much of the future development for the ArcIMS application will take place in-house. In order to be responsive to the changing needs of the public and advancing technology, additional training will be necessary so that custom programming can tailor the web applications to the customers' needs.

Timeline: Ongoing

**National Agricultural Imagery Program (NAIP).** Annually the USDA Farm Service Agency conducts mid-summer flights for the sake of crop assessment. As the quality of this flight increases over time, the County will consider purchasing the flight in a digitally georeferenced format to be used in forestry, planning, and land conservation applications. Although the frequency of purchase of this flight is dependent on need and cost, it is anticipated that it be purchased on a regular schedule. One logical schedule would be to purchase it in the middle of the 5-year cycle of the leaf off digitally orthorectified photos.

Timeline: 2007-2008

**Enhanced 911 mapping.** Legislation makes state grant funding available to implement enhanced wireless 911. The funds are generated by a surcharge on cellular phone bills. The implementation of this project is dependant on the size of the grant that Wood County receives to purchase hardware, software, and improve data necessary for a functional enhanced 911 system.

Timeline: 2006 -2009

**POWTS georeferencing - locating undocumented systems.** There are approximately 12,000 private onsite waste treatment systems in the County that have permits. Permits are issued for all systems that have been installed since 1969. Prior to 1969 many systems were installed: some of these systems have been replaced, but many of original systems are still being used. In Wood County all POWTS owners are billed a triennial fee for maintaining a database that keeps track of inspections that are required once every three years under state law. In order to appropriately bill all POWTS owners, they must all be identified in 2005 and 2006.

All existing POWTS should also be geographically referenced so that their absolute location can be determined. Currently POWTS permits can be linked to tax parcels by parcel identification number, but land subdivisions or changes in PIN numbers may cause this link to be broken.

Timeline: 2005 – 2006

**Parcel identification numbering.** With parcel mapping near completion, implementation of a parcel identification number system that serves as a geo-locator for parcels will be easily attainable. The system will be designed according to the WLIA Parcel Geo-Locator Standard. The standard allows parcels to be geographically located by the PIN, and improves effective data exchange.

Timeline: 2006-2007

**Mapping support for comprehensive planning.** Wood County will be working on a countywide comprehensive plan starting in the summer of 2005. The plan will be completed by two county planners over a period of 4 years. The process will incorporate a high level of public participation requiring many maps and public participation materials. Planning staff will need assistance in preparing maps for the planning document as well as public informational meetings. Map preparation will be done by existing GIS and intern staff.

Timeline: 2005 - 2010

**Continuity of government.** In a post 9-11 world, more time and attention is given to GIS and land records and the role they play in disaster planning and recovery. Although some consideration has been given to how to get a functioning GIS in place following both a natural disaster or a terrorist act, nothing has been implemented. In the next few years more time and money will need to be allocated towards implementing a plan that considers the hardware, software, data, and human resources necessary to get a functioning GIS in place following a catastrophic incident to the Wood County Courthouse where all of the components are currently housed.

Timeline: 2006-2008

**Imaging of land records documents.** Land related information held in Wood County offices will be made available across the computer network for more efficient access of data. Offices considering document imaging include: Planning & Zoning; Land Records; Real Property Lister/Treasurer; and Emergency Management Agency.

Timeline: 2007– 2010

**Land records workflow analysis.** Land records are maintained by many County departments and processing and maintenance need to be coordinated. Through workflow analysis the quality and efficiency of uncoordinated land records activities can be improved.

Timeline: Ongoing

**2. Assistance Requested.**

- a. **Technical Assistance.** Technical assistance that is used to carry out the Land Information Plan comes from a variety of sources. Wood County staff relies on assistance from consultants, agencies, and other land records professionals whenever necessary. The County land records staff consists of the land information officer and one GIS specialist.
  - i. **WLIP educational opportunities.** Wood County would like to see the WLIP continue to provide high quality, pertinent educational opportunities for participants in the program. The WLIP's reliance on the WLIA for educational outreach is a positive relationship that should continue into the future. These sessions are easily accessible and affordably priced.
  - ii. **Technical assistance.** Wood County is currently connected to the WLIP Internet Land Information Clearinghouse and Technical Assistance List Server Service. We regularly attend quarterly WLIA educational sessions, including the yearly conference. Wood County is also active in providing in-house training to employees using land information management systems. We recognize that training is the key to success in implementing new management systems in any office, and we proactively pursue cost effective options for providing such training.
  - iii. **Land Information Officer Network.** Wood County will participate in the Land Information Officers Network to address issues that pertain directly to county government land records modernization programs. Although LION is relatively new, it has proven an effective forum for land information officers to discuss and act on issues that directly affect county land information programs
  - iv. **North Central Wisconsin GIS User Group.** Land records staff participates in the NCWGIS User group to learn about new technology, regional GIS and mapping issues, and network with other GIS professionals in the region.
  - v. **Software assistance.** The County has annual maintenance contracts with the GIS software vendor Environmental Systems Research Incorporated. With the maintenance contract all software upgrades and patches are included. County staff are also entitled to customer support from ESRI as long as the maintenance contracts are kept up-to-date. ESRI also facilitates peer support from other users through its web page and has developed a web environment where additional scripts and software tools can be shared.
  - vi. **ArcView User Group.** Wood County conducts an ArcView user group meeting on a regular basis. The group includes county staff and also state employees. The purpose of the group is to facilitate more avenues of software support, and to promote a free exchange of ideas and new concepts.
  
- b. **Financing.** We have been able to replace manual information management with modern systems and absorb the operational costs into existing yearly budget expenditures. Departments that have benefited from modernized systems provided by the land records program have accepted and budgeted for any additional costs that maintenance of the system may present.

The County has been progressing with modernization projects using resourceful, cost-effective means. Due to limited funds many past project have been completed with existing or LTE staff, and been approached as cooperative efforts among departments.

The WLIP is critical to the continuance of modernization projects. The program in Wood County is almost entirely funded by retained fees and contribution-base grant funding. Without the program funds it is likely that modernization projects would be scaled back to a dangerously low level that would affect the future progress of the program.

It is important to recognize the contribution the Land Records Modernization Program has made to records management in the County. Without ongoing funding generated from the WLIP, we would not have made the progress experienced since 1992. Funding for the WLIP is generated by documents recorded in county Register of Deeds Office. The fees collected by the Register of Deeds is a user fee intended to fund land records modernization efforts. In recent years the state of Wisconsin has misused fees generated by the WLIP to fund non-land records expenditures. Efforts should be made to ensure that the land records fees are appropriately spent on land records modernization efforts.

- c. **Procurement.** As per Wood County Board of Supervisors policy, Wood County utilizes competitive procurement processes (bid, RFP and justified sole-source) consistent with State of Wisconsin and local procurement rules.

- 3. **Problems Encountered.** The WLIP has contributed to the statewide advancement of land records modernization efforts. Much of the advancement has been made possible by the overall program and the funding source of retained fees and contribution-based grant awards. Wood County has significantly benefited from the grant program in the past, and will adversely affected if it is not reinstated. The contribution-based grant program has significantly advanced the creation of countywide land use for comprehensive planning, the creation of building number inventories for emergency response, and numerous other projects involving data creation, improvement, or enhancement. The grants in the past were typically used to hire LTE and interns to work on specific projects that would otherwise not come to fruition.

### C. Custodial Responsibilities.

**Forestry.** The Forestry Department maintains area-wide and compartmental maps of County forestland. These maps are used to depict ownership, stand types, timber sales, cutting schedules, and many other forest management activities.

*Authority by internal policy.*

**Treasurer / Real Property Lister.** The Treasurer's Office keeps tax information and legal descriptions for parcels in Wood County. Tax data is updated through the Treasurer's Office for all jurisdictions except Marshfield and Wisconsin Rapids.

*Authority by § 59.25, and 70.09*

**Sheriff's Department.** Emergency 911 dispatch is utilizing computerized base maps to help with routing of emergency vehicles to incidents that are called in from hard-line telephones. With future grant funding enhanced 911 will enable cell phone calls to be located. Most of the base map

data is maintained by the land records department, but the Sheriff's Department does maintain the Master Street Address. Dispatch also maintains their record management for incoming calls on a computer database.

*Authority by internal policy and §146.70*

**County Surveyor.** The county surveyor is responsible for maintaining records pertaining to PLSS corners, section summaries, HARN, field notes and other survey documents. The surveyor position for Wood County is part-time and responsibilities are limited to records maintenance. Survey work is contracted out on an as-need basis.

*Authority by internal policy and § 59.74*

**Register of Deeds.** The Register of Deeds Office is responsible for scanning of recorded documents, maintenance of a tract index, grantee/grantor index, Unified Commercial Code (UCC), and records of certified survey maps and plats.

*Authority by § 59.43*

**Land Information Office.** The County Land information Office is responsible for the majority of the GIS data used by the County as well as maintaining the data for distribution. Staffing of 1 GIS specialist dedicated to this responsibility makes this possible. In addition the Land Information Plan is written and implementation of it is coordinated by the land information officer. Most mapping and data requests are completed by this office.

Maintain County base data. *Authority by internal policy.*

Prepare, maintain and implement County Land Information Plan. *Authority by §59.72*

Create and maintain digital parcel maps. *Authority by internal policy.*

File County aerial photography. *Authority by internal policy.*

Complete mapping and data requests. *Authority by internal policy.*

Coordinate and support land records modernization efforts among departments. *Authority by §59.72*

#### **Land Conservation Office.**

Programs administered by Land Conservation utilize computer databases and mapping for information storage and retrieval. GIS and land records are used in wildlife damage and abatement program, and erosion control, crop management and a variety of other programs. Inventories are created to keep track of a variety of land-based activities in the County.

Farmland presentation inventory. *Authority by internal policy.*

Nonmetallic mining inventory. *Authority by 295.13*

Manure storage facilities. *Authority by 92.16*

Watershed management. *Authority by internal policy.*

**Health Department.** Environmental health responsibilities of the Health Department require monitoring of numerous land-based data. There are approximately 12,000 private wells in Wood County for which records must be maintained. Currently the department's well information is logged in a database and referenced by parcel number or legal description. Other data maintained in this fashion include underground storage tanks, hazardous spills, landfills, land spreading sites

and dredge sites. In recent years there has been more interest in utilizing GIS to in mapping health related instances and issues.

*Authority by internal policy.*

**Emergency Management Agency.** The Emergency Management Agency is responsible for maintaining accurate information regarding materials, facilities, and situations that have the potential for creating life or property threatening conditions in Wood County. Some of the information maintained includes hazardous material storage locations, building number index, highway accident data, mass care/shelter facilities, resource inventory, emergency plans and more.

*Authority by internal policy and § Chapter 166, and §59.54*

**Parks Department.** The Parks Department maintains a wide variety of land-based data. Mapping of all park and recreation facilities is created and maintained in cooperation with the County Land Information Office. Other land information maintained is related to facility management. This includes scheduling information for park and trail maintenance, park mowing, road grading and patching, and fence maintenance. The department also maintains park facility inventory and informational maps for parks customers.

*Authority by internal policy.*

**Planning & Zoning Office.** The Planning and Zoning Office relies on land records information for informational purposes, and permitting and planning activities. Office activities and programs are supported by data that are primarily maintained in map and database format. The following listing is some of the of existing land records maintained in the Planning and Zoning Office:

Bicycle trails. *Authority by internal policy.*

School district boundaries. *Authority by internal policy.*

Land use maps. *Authority by internal policy.*

Zoning maps. *Authority by internal policy.*

Planning maps and documents. *Authority by internal policy and §66.1001*

Land subdivision review. *Authority by § Chapter 236.*

Private onsite waste treatment system inventory and maintenance records, and permit information.

*Authority by Com 83.54*

Zoning permit information. *Authority by internal policy.*

Demographic data. *Authority by internal policy.*

Supervisory districts. *Authority by internal policy.*

Federal Emergency Management Agency flood maps. *Authority by internal policy.*

Wisconsin Department of Natural Resources digital wetland inventory. *Authority by internal policy.*

**Highway Department.** The Highway Department maintains information relating to the inventory of County roads, bridges, culverts, and other transportation-related facilities. A road registry is maintained by the department to provide historical reference for all roadways in the County. In regards to legal width, alignment, and extent of existing roadways, the Road Registry is the main data source. The Department also maintains road deck files for surface and subsurface construction information.

## **E. Foundational Elements and Statewide Standards.**

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

- a. Documentation of County data. Wood County is continually working on documenting procedures for modernizing land records. Documentation currently exists for many commonly performed procedures that pertain to GIS data creation and maintenance. Much of the data we have contains metadata that encourages the responsible use and maintenance of county GIS data.
- b. Resources available. The Land Information Office serves as a resource for any land-based information, and technical assistance using the many GIS base layers for mapping or analysis projects.
- c. Identification of customer needs. County staff is responsive to customer needs and they are considered whenever new land records processes or systems are implemented.
- d. Coordination of education/training with agencies, associations and educational institutions. We encourage sharing resources to provide education and training and in the past have offered GIS training sessions that were open to other governmental agencies and the general public. We support training opportunities offered by associations such as the WLIA because they are cost-effective ways of providing information on timely topics at a reasonable price. We also encourage and participate in opportunities that educational institutions offer because of the professional quality of instruction that improves staff efficiencies and knowledge.
- e. Use of technology to facilitate education and training. All County staff have internet access to online training or coursework offered, and participation in training sessions is encouraged. On occasion, educational sessions and demonstrations are presented to staff, elected officials and the general public.
- f. **Use of, or plan to participate in Clearinghouse and Technical Assistance List Server.** Wood County land records staff uses the Clearinghouse and Technical Assistance List Server as needed.
- g. **Use of Land Information Officer education and training funds.** Education and training funds are used to send Land Records Department staff to training at conferences and workshops.

### **2. Geographic Reference Frameworks**

- a. **Geodetic control networks.** Wood County completed a densification of the HARN in 1995 with the assistance of a WLIP grant. In total, 104 monuments are included in this network: 12 - 16" dia. x 5' deep concrete monuments built to DOT specifications; 5 NGS monuments that were already in existence; 75 - 6" dia. x 7' deep concrete and steel monuments designed by our local surveyors; and 12 section corner monuments, all of which are Harrison or Waupaca Foundry cast iron.

The network was designed with the assistance of the Department of Transportation. Lampert, Lee & Assoc., Wisconsin Rapids, WI was awarded the contract for the observations on the two-county project.

The Wood County geodetic network was developed with three levels of accuracy, and complies with the WLIB Specifications and Guidelines to Support Densification of the

Wisc. High Accuracy Reference Network (HARN) Using Global Positioning System (GPS) Technology - June, 1995).

- b. **Public Land Survey System.** There are approximately 2700 PLSS corner and ¼ corner monuments in Wood County. Approximately 1,890 of these monuments received maintenance and had coordinates derived from ties to the geodetic control network. The majority of this work has been performed in the populated areas of the county where survey work is frequently done. The remainder of the County contains over 200 square miles of County and state forestland, cranberry bogs and marshes. This area will most likely not be remonumented due to a total lack of future development potential. Most remonumenting will result from private surveys commissioned in the area.

Wood County has established budget line items in both the surveyors and land records accounts to continue remonumentation efforts so that section corners are properly maintained.

- c. Photogrammetric base maps. Following the digital orthophotography flight in spring of 2005, GIS base referencing orthophotos as a base will be updated. Wood County does not have building planimetric features, but will consider acquiring them following a DOP update in 2010.
- d. Digital elevation models (DEM). Wood County does not have a digital elevation model, but will consider acquiring a DEM as part of the DOP update in 2010.
- e. Digital orthophoto (DOP). The County will be acquiring digital orthophotography in 2005 and anticipates acquiring updated photos every 5 years depending on cost and need.
- f. Digital terrain models. Wood County does not have a digital terrain model, but will consider acquiring a DTM as part of the DOP update in 2010.
- g. Digital raster graphic. In 1998, Wood County purchased the USGS DRG's for Central Wisconsin. These files have been converted to Wood County coordinates, tagged with their proper 7.5 minute quadrangle name and made available in TIFF format. on the computer network.
- h. Triangulated irregular networks (TIN). The County does not have a digital terrain model, but will consider acquiring a TIN as part of the DOP update in 2010.
- i. Contours. Contours will be completed for Wood County when funding is available or a strong need identified. Because of relatively flat terrain countywide, contours are currently not a priority.
- j. Satellite imagery. Wood County does not have plans for purchasing satellite imagery at this time. Future consideration of purchasing satellite images is dependant on technological advances in the field and the cost and benefits of purchasing it in comparison to film and digital-based orthophotography.
- k. Ability to support wireless 911. If and when Wood County can support wireless 911 calls is dependant on funding of software, hardware and data improvements. A portion of the costs associated with implementing wireless 911 have been requested from the Wisconsin Public Service Commission through a grant application.

### 3. Parcel Mapping.

- a. – b. Parcel map preparation. Parcel maps that are created reference the public land survey system and can be used by local governmental units for accurate land title boundary line or land survey line information. Parcel maps contain parcel identification numbers and

will be redesigned to meet the WLIA's Parcel Geo-Locator Standard. The parcel maps are not a replacement for recorded documents that are the legal basis for parcel geometry and ownership information. Mapping meets the WLIA's Digital Parcel Mapping Standard.

- c. Coordinate system used. The framework for parcel property map is based on the Wood County Geodetic Control Network. This network is part of the High Accuracy Reference Network (HARN), or High Precision GPS Network (HPGN) which is a cooperative effort between the National Geodetic Survey and individual states to readjust the NAD83 to a higher level of accuracy.
- d. Parcel ID. Wood County and the municipalities involved with parcel management (Wisconsin Rapids and Marshfield) are committed to developing a numbering scheme that is compliant with the WLIA's Parcel Geo-Locator Standard.

#### **4. Parcel Administration.**

**a. Design.** Wood County maintains digital parcel mapping that links up to the County tax database using a tax identification number. All parcels have a parcel identification number that is referenced to the PLSS, but the PIN will be redesigned to the WLIA Parcel Geo-Locator Standard in the near future.

**b. Activities.** The following items will be maintained to be used in conjunction with digital parcel mapping.

**Parcel ID.** Currently the County has a tax identification number, and a parcel identification number. The PIN will be redesigned to the WLIA Parcel Geo-Locator Standard in the near future, and the tax identification number will also be maintained.

**Tax data.** Tax data is maintained by the County real property lister. This data is incorporated into the GIS and made available to the public through the County ArcIMS internet application. The Systems Department supports the processing of data in the creation of tax bills, and receipting of tax payments.

**Owner name & address.** The name of the tax parcel owner is maintained by the real property lister and is essential for the tax billing process.

**Description/current document pertaining to parcel.** The tax parcel database contains a legal description and reference to deeds that have been recorded that show the legal owner of the property.

**Document imaging.** Since 1999 all documents related to property transactions have been scanned, digitally indexed, and recorded by the County Register of Deeds Office.

**Real estate transactions.** The County Register of Deeds Office maintains all documents pertaining to real estate transactions that have been submitted to the office to be recorded.

**Easements and restrictions, including conservation easements.** Easements and other restrictions to property that are submitted to the Register of Deeds Office are recorded.

Tax exempt status. All property that is legally tax-exempt is coded so that taxes are not assessed on the property.

Zip codes. Zip codes of all property owners are included in the tax database.

Assessment class. Department of Revenue assessment classes are assigned to every property in the County.

Public lands. Public lands are tax exempt and can be mapped in the GIS.

Liens. All liens are recorded by the Register of Deeds Office.

Evidence of title. The Register of Deeds Office maintains a digital tract index that allows property to be queried to determine legal title of the property.

## 5. Public Access.

- a. **Use of technology to facilitate efficient access.** Wood County encourages the use of technology to facilitate efficient access to land records. Improved access to a land records is made possible through internet and intranet based applications. Special attention is given to the ease of use of these applications so that even the occasional user can access land records easily. In the future more internet-based applications will be developed to serve records to the public in an efficient and user-friendly application.
- b. **Data sharing policies (copyright, licensing, fees etc).** Data-sharing is encouraged because of the resulting cost savings and efficiencies. The County does not have any formal data sharing policies, but has many informal agreements to share data when possible. No data is subject to copyright or licensing, but in the future copyright and licensing will be considered as needed. The County does have a fee schedule for distribution of the maps and data. Much of the data that is exchanged among departments and different units of government is not subject to the fee schedule, but free on charge in return for future map and data cooperation.
- c. **Open access to data in existing format.** Wood County makes land records information available according to the requirements of the Wisconsin Open Records Law.
- d. Optional production of customized data on cost-recovery or other basis. The County offers the service of customized mapping and data compilation on a time-and-materials basis.
- e. Internet accessibility (ADA compliance, security). The County web site is ADA compliant to the greatest extent possible at this time.
- f. **System security.** System security is maintained by the County Systems Department. At this time all data made available to the public through the internet application is a copy of the original data stored on a server separate from the other County records.
- g. **Privacy policies.** The County makes land records information available according to the requirements of the Wisconsin Open Records Law.
- h. Use of the \$1 fee designated for land information and housing data. The \$1 fee has been used to make tax parcel data and mapping available over the internet. In the future the \$1 will be used to improve and maintain internet mapping applications.

**6. Zoning Mapping.**

- a. Zoning districts. There is no countywide zoning, but zoning maps of municipalities that administer their own ordinances are created at the request of the municipality.
- b. Shorelands. Shoreland areas are determined referencing the County hydrography layer and buffering to delineate shoreland zones as defined by the County Shoreland Zoning Ordinance.
- c. Floodplains and floodways. Floodplains are mapped for the County, but the floodways are not identified in this GIS layer.
- d. Environmental corridors. Environmental corridors are not mapped for the County because no inventory identifies what areas are considered to be environmental corridors. Furthermore, there are no County standards that define what constitutes an environmental corridor.
- e. Burial sites. There is no mapping of burial sites located in the County.
- f. Archaeological sites. Archaeological sites are not mapped at this time. Determination of archaeological sites and mapping them takes place on an as-need basis where changes in land use warrants identification of these sites.
- g. Historic/cultural sites. For information on registered historical sites the state and federal historic registries are referenced. There is no inventory that is locally maintained and mapped.

**7. Soils Mapping.**

- a. Digital soils maps are available for Wood County as a result of a statewide strategic initiative. All soils data is consistent with Natural Resource Conservation Service standards and specifications. Maintenance of soils data is needed for Wood County and coordinated by the NRCS.

**8. Wetlands Mapping.**

- a. Digital wetlands maps were purchased directly from the DNR Water Regulations Division in 1996. This information has been incorporated into the County GIS and is available for use by all departments having access to the system. These maps were created as per § 23.32.

**9. Institutional Arrangements and Integration.**

- a. Formal data sharing agreements (Memorandums of Understanding etc.) The County currently does not have any formal data sharing agreements, but successful exchange of data has often occurred through informal data sharing.
- b. Formal or informal data maintenance agreements between departments/agencies. Informal data maintenance agreements among County departments exist for the maintenance of data.
- c. Cooperative arrangements (e.g. agencies; libraries; schools; RPC's; utilities; privates) The County does not have any formal cooperative agreements at this time, but advocates and supports the use of data in cooperative agreements. All future formal cooperative agreements will be considered on a case-by-case basis.
- d. Consortia (e.g. inter-county, regional). Wood County is part of an air photo consortium that was organized by 2 state regional planning commissions. Thirty-three counties were involved in the flight resulting in very affordable digital orthophotography. Similar consortium flights are anticipated to take place every 5 years.

- e. Collaborative arrangements (e.g. sharing of: local/state staff and budgets; technical assistance; peer review; collegial plan preparation; common help desk; bartering and mentoring etc.) The County supports collaborative agreements where efficiencies and cost-savings result. Informal collaborative arrangements have led to many of the land records successes for the County.
- f. Statutory relationships among counties and state agencies. The County will comply with any statutory requirements relating to land records.

**10. Election and Administrative Boundary System.** All boundaries below are compliant with local government uses.

- a. State outline. The Wisconsin state outline was acquired from a state source and is used in the County GIS.
- b. County boundaries. The Wisconsin county outline layer is acquired from a state source and used in the County GIS.
- c. Civil division boundaries. Civil boundaries are created from tax parcel mapping.
- d. Utility districts. Mapping for utility districts is not maintained at this time.
- e. Emergency service areas. Emergency service areas are mapped for the County.
- f. Legislative districts. Legislative district maps are maintained by the state and referenced as needed.
- g. Election (voting district) boundaries, wards, supervisory, assembly, senate, etc. The County created ward and supervisory districts, and voting district maps in 2001.
- h. Tax incremental financing districts. The County tax database codes all parcels that are included in TIF districts.
- i. School districts. District information is included in the tax database and district maps can be created in the GIS.
- j. Lake districts. There are no lake districts in Wood County.
- k. Census geographies. Census geography from the US Census Bureau is housed on the GIS server, and updates and additional data sets are added on a regular basis. Census geography is used for mapping demographics for customer requests and planning projects.
- l. Native American lands. All Native American lands are included in the County parcel mapping and can be queried and mapped on request.
- m. Agency administrative districts and zip codes. Digital zip code boundaries are available and in need of improvement.
- n. Public administered lands. These lands are included in the GIS parcel maps and can be queried and mapped on request.

**11. Street/Road Centerline and Addresses.**

- a. Transportation network (streets, roads, highways, railroads). The transportation network for the County is mapped and consists primarily of facilities related to vehicular, rail and air transportation.
- b. Right-of-ways. Right-of-way is created during the parcel mapping process for all townships and villages in Wood County.
- c. **Centerlines.** All centerlines with address ranges are mapped for the County. The centerlines are used to create street maps and other base maps, and are an integral component of the County's emergency response system.
- d. Address ranges. Address ranges are maintained by the County Planning & Zoning Department so that they can be used to automatically locate addresses through geocoding.

- e. Site address database. For most towns and villages site addresses are maintained.
- f. Address point, structure and/or driveway. Site address points are maintained and merged with the parcel index mapping so that properties can be queried by building number. Address points are located at the approximate driveway locations.
- g. **Road names.** Road names are maintained as an attribute in the County street centerline layer.
- h. Functional class. The County relies on the District 4 DOT for up-to-date functional class information.
- i. Places/landmarks. There is no place or landmark database or GIS layer at this time.
- j. Integration with the County's/City Master Street Address Guide (MSAG). The 911 Coordinator has integrated the street centerline file and the MSAG in the County E-911 system.
- k. Ability to support emergency planning, response and mapping. County data is capable of supporting emergency planning, response and mapping. To ensure that the transportation files can be turned into useful emergency response maps, more definitive response processes and procedures should be defined.
- l. Ability to support wireless 911. The County data layers are capable of being used to support wireless 911. Prior to use in an E-911 system data updates and improvements are necessary.

## **12. Land Use Mapping.**

- a. **Mapping of existing land use.** Land use maps are available for all townships in Wood County and created using the Land-Based Classification Standards. Land use mapping for cities and villages will be completed in the future on an as-need basis. Land use codes that are used in the tax parcel database are compliant with the Department of Revenue Land Use Classification System. All mapped land use is local government compliant and used by municipalities in planning projects.
- b. Mapping of planned land use. Planned land use will be created as a product of the Wood County Comprehensive Plan that will be completed by 2010. Some municipalities have already mapped future land use to a detailed level that will be included in the County Comprehensive Plan.

## **13. Natural Resources.**

- a. Land cover. Mapping for detailed land cover does not exist for Wood County, however the WISCLAND Land Cover is referenced on occasion. The WISCLAND Land Cover is used by the Department of Natural Resources.
- b. Watersheds. Watersheds are mapped for the County and were acquired from the Wisconsin Department of Natural Resources.
- c. Geology. The geology of the County is not available at this time.
- d. Hydrogeology. There is no hydrogeology data available for Wood County.
- e. Forests. Forested areas in the County are not mapped at this time.
- f. Hydrography. The hydrography of the County is mapped and was created based off of data from the Department of Natural Resources.
- g. Non-metallic mining. The County currently has a GIS layer that contains all active and most inactive non-metallic mining sites. The inventory was created by Planning & Zoning staff and is currently maintained by the Land Conservation Department.

- h. Endangered resources. Endangered resources are currently not mapped. The County would like to include mapping of the general location of endangered resources to be considered when changes in land use occur.
- i. Impact on the environment. Mapping has been part of a variety of County Health Department studies and we anticipate its increased use to show human impact on the environment as it relates to health issues.

#### **14. Data Base Design.**

- a. **Design evaluation.** Most data that Wood County creates/acquires is used by more than one department. Prior to creating/using new data sets the primary users of the data are considered and consulted as to their needs. Other consideration of design include consistency of data sets and practical naming and design. Design evaluation weighs the needs of the users and balances it with best practices of design. Design evaluation will need to take into consideration the flexibility and the added functionality of geodatabases.
- b. **Project approach.** Approach varies on each project depending on who will be completing it, and the size and longevity of it. Projects that are completed for a single need or one-time use are not approached as methodically as larger ones that will be integrated into daily workflow and maintained over a long period of time. Larger projects that are integrated into workflow many times are developed with documentation on how the project was completed, timeline, quality control measures, and maintenance schedules.
- c. **Timeline.** Timelines are usually assigned to each project. Aggressiveness of the timeline varies to its' urgency and priority among other projects. It is not uncommon for timelines and priorities to be adjusted as more time-sensitive priority projects arise.
- d. **Metadata.** Metadata is maintained for many of the County's GIS layers. It is not 100% complete at this time, but metadata improvement is a new initiative that will strive for near complete coverage of all Wood County GIS layers. Data sets that are created for a specific use for a limited period of time and for an identified user may not be subject to metadata requirements of shared GIS baselayers.
- e. **Security/privacy.** Security of GIS data and other land information from outside threat is administered by the IS Department. Administration of user accounts is administered by the IS Department and Land Records Staff. Regular backups are maintained both on and off-site to restore corrupt or compromised data. Privacy will be maintained to land records where appropriate, but most of the land records used by county staff are subject to the Open Records Law of Wisconsin. Privacy issues will likely draw attention as more data is served online, and more health and emergency service applications are developed in upcoming years.
- f. **Implementation and maintenance strategy.** Prior to implementation of any project or system, informal evaluations take place to determine if the change will meet the goals of the Wood County Land Records Modernization Program. Prior to implementation, maintenance strategies and quality control measures are considered and a determination made as to if the implementation will be beneficial and the maintenance attainable.
- g. **Data quality management.** Following the completion of updates, the custodian is responsible for reviewing the accuracy of the changes, or requesting review assistance from other appropriate county staff. Quality control in many cases is achieved simply by notifying the custodian of errors or necessary updates when they are encountered during use.

- h. Needs assessment. In the process of updating the Plan many needs are identified in interviews with member of the Land Records Advisory Committee, included in the Plan, and considered for future fulfillment. Needs that are identified subsequent the planning process are considered and carried out dependant on the value and size of the project, long-term benefits, and if it will help achieve the goals of the Plan.
- i. Data structure and format (e.g. topology). Simple topology rules of the ESRI environment are followed at this time. Data Structure and format are will be reviewed in the near future as the conversion to geodatabases takes place.
- j. GIS data model. The data model in Wood County is relatively simple at this time because most of the GIS layers are coverages or shape files. Data model planning will take place prior to the conversion of files to geodatabases. As we convert files to we will remodel them considering the less restrictive structure and added functionality of geodatabases.
- k. Data dictionary. When necessary data dictionaries are created for data sets.
- l. Coding schema. The County uses simple coding schema for many data sets. Coding schema is a combination of County created schema and that of other agencies.
- m. Transaction management. Transaction management is currently in place for some GIS layers by date stamping records as they are updated or changes. As the conversion to geodatabases occurs more thought will be given as to track record changes over time.
- n. Organizational information flows. Understanding of organizational information flows is necessary in implementing improved land records systems, and ensuring proper maintenance. Improving information flow is a new initiative of this plan.
- o. Data conversion. All County departments use Wood County data in the same geographically referenced coordinate system. On request, as an additional service staff can convert data for the customer. Enhancements to ESRI software have streamlined the conversion process and the compatibility of data sets in different projections. Tabular data can be converted in almost any common format to meet the customer's needs.
- p. Ability to integrate with other databases and information systems. Prior to the creation of data sets, there is significant consideration on what will be needed to integrate and link/join the database with other information systems. This is especially important to Wood County given the number of departments that have custodial responsibility over data that other departments integrate into their workflow on a daily basis.
- q. Data interchange standards. Data interchange arrangements have been on an informal basis. Due to the County's use of industry standard GIS software, interchange of data has been effortless, minimizing the need for formal arrangements. Wood County utilizes the Wisconsin Land Information Board's model for the exchange of geodetic control data.

## **15. Infrastructure and Facility Management.**

- a. Parks. Boundaries of all County parks are maintained, in addition, park boundaries are shown in the tax parcel mapping as exempt and owned by Wood County.
- b. Transit system. The transit system in Wood County consists primarily of streets and railroad which are both mapped.
- c. Harbors. There are no harbors in the County, however boat launches are mapped.
- d. Airports. Both the Marshfield and Wisconsin Rapids airports are mapped.
- e. Recreational trails. Wood County has a variety of recreation trails. Most of the trails are mapped but there is no single, consolidated GIS layer that shows all of them.
- f. Utilities. Utilities that provide service in the area have maps of varying technology and degree of accuracy. Some of the utilities are willing to share data as part of data sharing

- agreements. The County maintains a GIS layer of larger gas lines and large capacity overhead power lines.
- g. Government facilities. Government facilities can be identified by tax-exempt status and ownership in the parcel index mapping when linked to the tax database.
  - h. Hazardous materials sites. The County Emergency Management Agency maintains a GIS layer that identifies sites where significant amounts of hazardous materials are stored. The DNR has information about Leaking Underground Storage Tanks, but this information is in a database format without a georeferenced mapping layer.
  - i. Landfills. The DNR does have a database of some abandoned landfill sites in the County. Location and status of operating landfill sites is available from the DNR.
  - j. Bridges, culverts, traffic road signs. The Highway Department maintains county road bridge, culvert, and sign locations in a database. The department has considered maintaining this information in a GIS.
  - k. Boat landings. Boat landings are mapped and shown on County park resource maps.

## **F. Integration and Cooperation**

1. **What integrative/cooperative relationships would your county like to develop?**

There are many state and federal agencies that are required to maintain statewide databases of information. Instead of these agencies developing their own statewide coverages for this data, we would like to see them utilize local data, such as parcels, hydrography, and land use to stitch together statewide coverages. The County has cautiously approached formal sharing agreements that require submission of data to users often throughout the year, in exchange for data that is not used often, and relatively unimportant to County needs.
2. **What potential partners and mutual projects does your county plan to pursue?**

The County plans to participate in future aerial photography flights coordinate by the regional planning commission. County staff is open to partnering an mutual projects provided the project meets the goals of the County Land Information Plan, acceptable County standards, and the portion of County staffing and budgeting is appropriately approved.
3. **What data would be shared and used in both of the above?** The data that would be shared and used would be considered on a case-by-case basis. Appropriate review of the agreement would take place by the County Corporation Council and approval of the Planning & Zoning staff. It is worth noting that although Wood County does not have any formal, standing agreements in place at this time, much has been accomplished with informal agreements in the past.
4. **Coordination of funding.** All County departments that have potential or expressed interest in land records modernization efforts have representation on the Land Records Advisory Group. As members of the Advisory Group they are interviewed for input in updating the Land Information Plan, and are involved in the review of the written document. Coordination of funding and staff resources among departments is necessary to successfully implement this plan.
5. **Participation of municipalities and other agencies.** Although Wood County does not advocate the proportionate dispersion of retained fee to municipalities in the County, it does enthusiastically share data and resources that are part of the Wood County Land Records Modernization Program. Municipalities and agencies are stakeholders that the County considers when developing data and programs. The County Program is responsive to the needs of the municipalities and provides data, mapping and training opportunities when available.

**H. Administrative Standards Not Associated With Foundational Elements.** Plans represent an agreement between the County and the Wisconsin Land Information Board. 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 Board, the Board and the county agree and consent as follows below. If applicable, discuss any plans, problems, issues, and concerns relative to these agreements.

1. Wood County agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other relevant statutes.
2. Wood 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. Wood County agrees to complete the Annual WLIP Survey.
4. The County agrees to update the plan every 5 years and in the interim as necessary.
5. The Board agrees to facilitate technical assistance to the County including an on-line technical assistance service.
6. The Board agrees to maintain and distribute an inventory of land information and land information systems for the state. This will be provided through an electronic clearinghouse.
7. 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.
8. The Board agrees to review funding requests and to provide guidance to local government with respect to the development of such requests.
9. The Board agrees to make available electronically an Annual Report regarding the status of the Wisconsin Land Information Program and the activities of the Board.