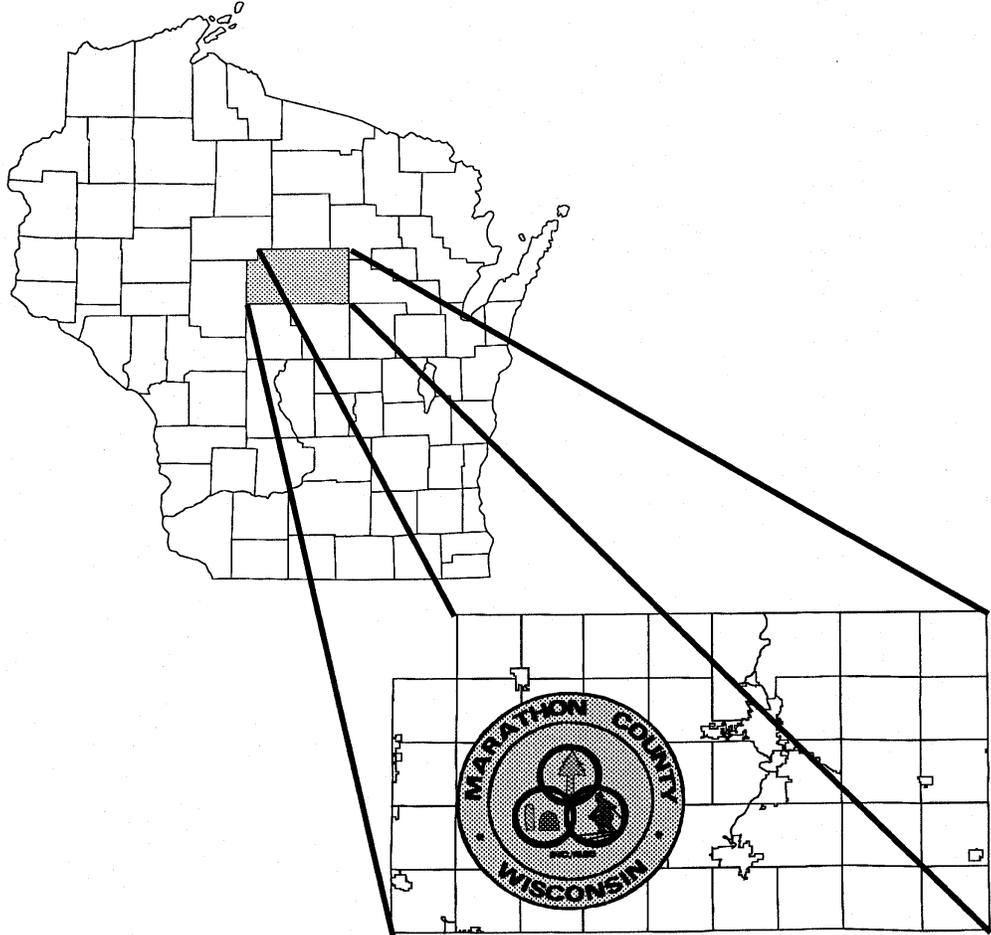


LAND RECORDS MODERNIZATION PLAN



**MARATHON COUNTY,
WISCONSIN
2010 - 2014**

MARATHON COUNTY LAND INFORMATION OFFICE

TABLE OF CONTENTS

I. EXECUTIVE S

- A.....Contact Information 2
- B..... Participants in the Planning Process 2
- C.....Plan Summary 2

II. LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN

A. Goals and Objectives	4
B. Progress Report On Ongoing Activities.....	5
C. New Initiatives.....	5
D. Custodial Responsibilities	7
E. Framework Data, System Implementation and State-wide Standards	9
F. Public Access.....	11
G. Integration and Cooperation	12
H. Communication, Education, Training & Technical Assistance	13
I. Administrative Standards Not Associated with Foundational Elements.....	13

Prepared by
Marathon County Conservation, Planning and Zoning Department

I. EXECUTIVE SUMMARY

A. The Contact Person is:

Gary Hetzer, GIS Coordinator (LIO)
Marathon County Conservation, Planning & Zoning Department (CPZ)
210 River Drive
Wausau, WI 54403
(715) 261-6041
Fax: (715) 261-6016
e-mail: gthetzer@mail.co.marathon.wi.us

B. The Marathon County's Land Information Council members are as follow:

County Board Supervisor	to be appointed
County Treasurer	Lorraine Beyersdorf
GIS Coordinator (LIO)	Gary Hetzer
County Surveyor	Emily Pierce
Register of Deeds	Mike Sydow
Lead Property Lister	Linda Schroeder
CCITC	Gerry Klein
Safety Communications Rep.	to be appointed
Realtors Association Rep.	to be appointed

C. Plan Summary

This Plan is to assist the development of an effective Land Information System utilizing the County's personnel and technical resources over the next five years. Some of the key elements of this plan are the completion of the remonumentation of the Public Land Survey System program within the County to make available the most accurate parcel and survey information possible. County survey grade GPS equipment will be used to increase the accuracy of the parcel and survey control information. Another element is the acquisition of digital orthophotography. This will be used to update existing map data and make it more accurate and timely, as well as aid in the development of elevation data to assist in flood plain and wetland determinations. The County will be continuing to the use of new technology to provide access to the data by County departments through intranet applications. Internet applications will be utilized to provide access to a substantial amount of this data to other governmental agencies, communities and the general public. All of these elements will be developed while maintaining the work already completed and in progress to date. The County intends to periodically review the plan and modify it as necessary to keep the document current due to changing technologies and/or new land related regulations.

D. County Land Information Website

Access to Marathon County Land Information can be found at the County web address: <http://www.co.marathon.wi.us>

E. Other Local Web Sites with Land Information:

City of Wausau	http://www.ci.wausau.wi.us
City of Marshfield	http://ci.marshfield.wi.us
Village of Weston	http://www.westonwisconsin.org

II. Land Information Modernization and Integration Plan

A. Goals and Objectives

1. Marathon County will actively evaluate new technologies and solutions in search of cost-effective answers to the problems associated with the growth and improvement of land record activities. It is intended that some of these answers will be found through the implementation of this land record modernization plan and the utilization of the resources that it makes available to local governments, state and federal agencies, and the general public.

Goal #1: To modernize the land records of Marathon County and the participating local governments and agencies taking part in the Marathon County Land Records Modernization Plan.

Objective: For Marathon County to maintain and enhance the digital map of all parcels in Marathon County that would be available to all participants.

Objective: To create and convert customized databases for participants that relate directly with appropriate digital maps.

Objective: To continue the automated tract indexing and document imaging programs.

Goal #2: Increase inter- and intra-governmental cooperation and coordination concerning land records modernization and to include the private sector as a partner in the process.

Objective: To make land records available to the general public in the most useable manner as possible.

Objective: To develop controls and procedures for dissemination of automated land records.

2. Database Design -

The County has Environmental Systems Research Institute's (ESRI) software products on IBM RS/6000 Unix and Microsoft Windows PC/Server platforms. Tabular land records data are on IBM iSeries and Microsoft Windows Servers. Future digital information plans will be consistent with existing hardware & software per the direction of the IT group. Any outside source developing maps or databases for the County would be required to provide digital versions that are compatible with the County GIS format and geodetic system.

B. Progress Report On Ongoing Activities

1. Remonumentation/Surveying Work -

The County is presently working to complete the remonumentation and resurvey of the Public Land Survey System (PLSS). Work to obtain County Coordinates on all government corners along with the bearings and distances that accompany each corner is also being done.

2. Digital Map Databases In System -

The County has obtained and/or created the County planimetric base map derived from aerial photography (2005). Digital soils maps (NRCS), Digital Wetlands maps (WiDNR), updated Digital Flood Plain maps (FEMA) and the Digital WISLR (WiDOT) road database have been acquired for the entire county.

Digital "Index" Parcel Maps have been created from deeds, surveys and plats with 100% of the County complete. The County maps all reference the Marathon County Coordinate System. This layer is being adjusted as new corner coordinates are developed. This layer is maintained daily.

3. Document Imaging System -

The County has a document imaging system in the Register of Deeds office for land related documents and deeds. The system is currently used for deeds, surveys, plats and other land related recorded documents. The CPZ Department is scanning other land related documents into the system such as: Sanitary Permits, Zoning Permits, Farmland Preservation Agreements, Survey Corner Tie Sheets, Section Summaries and Plats of Survey.

4. Public Access System -

The County has a public access system in the Register of Deeds office to allow the public to view the tax parcel database information and document

imaging system. This system is available to most County departments. The County also has contracts with local companies for full Internet access to the database and imaging. The County also has a web based Land Record access system as well as web based access to parcel mapping.

C. **New Initiatives**

1. Proposed Project -

a. Orthophotography/Satellite Images -

The County will acquire a county-wide Color 1' pixel orthophotography flight for the spring of 2010. A number of planimetric base map features will also be captured from the flight. Some local communities will be acquiring additional higher resolution 6" photography and planimetric features.

b. Intra- and Internet Availabilities -

The County will continue the development of new Departmental Intranet applications and/or uses for GIS information via the web browser, allowing access for all county departments to all GIS databases. This will reduce the need for individual departments to purchase hardware and software allowing GIS ability and access. Continue to maintain the Public Internet Mapping application and data.

c. E911/GIS Interface -

The County intends to improve the connectivity/applications between the GIS interface/data and the E911 system already in place. Enhancements will include the access to mobile 911.

d. Benchmark Elevation Data Integration -

The goal is to interface with the WIDOT's elevation points obtained within the County with benchmark elevations that have been captured in past elevation projects. These points will be used by the surveying community as well other governmental agencies for vertical elevation information within the County. The updating, identifying, locating, and reestablishing of control points that include benchmark elevations can be used for flood plain and wetland determinations, airport height regulations, and will provide more accurate data and assist in the maintenance of the GIS's spatial integrity.

e. Redistricting Project from the 2010 Census

The County staff will utilize GIS to assist with County Supervisory redistricting scenarios including assistance to local communities with Ward Boundary development.

- f. Watershed Data development
County staff will develop databases pertaining to Farmland Programs and utilize GIS to develop watershed programs. Data to be included will be CAFO sites, Preservation Contracts, Nutrient Management Plans and Exclusive Agriculture Zoning Contracts.
- g. Social Security Number Redaction
County staff (Register of Deeds) will perform redaction of Social Security Numbers from previously recorded documents per the 2009 Wisconsin Act 314 utilizing funds retained for this function.

2. Assistance Requested -

- a. The County is currently connected with the Land Information Technical Assistance List Server Service. The internet Wisconsin Land Information Clearinghouse (WISLINC) will be utilized when appropriate data is available.
- b. The County is committed to implementation of the Land Records Modernization Program. The retained fees and grant program need to be continued to insure the success of the ongoing activities and new initiatives.
- c. The County will continue to follow County Ordinances and State Statutes for procurement of services and products related to this plan.

3. Problems Encountered -

- a. All unanticipated problems have been resolved when they have occurred. Some problems identified were staffing, staff time, and funding for all aspects of the program. An example is the high cost to acquire county-wide elevation LIDAR data for 2 foot contour development.

D. Custodial Responsibilities

The following is a list of county departments and the land records they are responsible for:

Register of Deeds -

- All Recorded documents such as deeds, mortgages, Surveys and Subdivision maps.
- Maintain the real property tract index.
- Digital scanning of associated recorded documents.

Redaction of Social Security Numbers from recorded documents.

Property Description (Treasurer) -

- Maintain the digital index parcel maps.
- Maintain ownership and description information on all parcels of property.
- Maintain school and special district information.
- Maintain special assessments information.
- Maintain real estate assessments.
- Maintain site address.
- Produce hard copy parcel maps for the Public.

Planning Services (CPZ) -

- Maintain the Metro Sewer Service Area Boundaries.
- Develop/maintain Land Use/Cover map data.
- Maintain Metropolitan Planning Organization (MPO) map data.
- Oversee Census data and Redistricting.

Geo Services Division (CPZ) -

- Oversee all GIS graphic and database information.
- Produce maps and map database queries for the public.
- Maintain the rural address maps.
- Provide rural address assigning services.
- Maintain and reproduce the county air photos.
- Provide GIS technical assistance to County Departments.
- Oversee web access to mapping programs.

Zoning & Regulatory Services (CPZ) -

- Maintain Zoning maps for the County Zoned unincorporated areas.
- Maintain Zoning Maps for the Independently Zoned unincorporated areas.
- Oversee Flood Plain & Wetland maps/determination.
- Maintain private sanitary system site plans.
- Maintain Non-Metallic Mining Permits and data.
- Digital scanning of Zoning documents and site plans received.

County Surveyor (CPZ) -

- Maintain the Section Summaries and Corner Sheets for the County's Public Land Survey System Corners.
- Maintain information on the High Accuracy Reference Network (HARN) densification in the County.
- Maintain private survey maps provided to the office.
- Maintain and acquire coordinates for the County PLSS corners.
- Maintain records of elevation markers and their condition.

Conservation Services (CPZ) -

- Oversee the use of county soils maps and database.
- Maintain County Tract and Field boundary data.

Maintain Watershed data.
Maintain Farmland Preservation Program Data.
Maintain Public Access to Water Resources Location Data.

Highway -

Maintain county highway right-of-way plats and construction plans.
Maintain county highway sign data.
Maintain County/Town Bridge Information.
Maintain WISLR/PASER road inventory data

Treasurer -

Maintain taxing and financial information on the County land parcels.
Maintain tax rate information.

Forestry -

Maintain forest stand boundaries.
Maintain County recreation trails facilities.
Maintain County snowmobile trail maps.

Sheriff -

Maintain master street address guide (MSAG).
Maintain accident and crime data.
Maintain Street Centerline address range data for E911 system.

Health -

Maintain tabular private well data,
Maintain environmental health data.
Maintain Food Sanitation site inspection data.

County Clerk -

Maintain Voter Registration Database.
Maintain Polling Site Database.

City-County IT Commission -

Maintain all computer hardware, software, and networking capabilities for County employees.
Provide technical assistance for Information Systems to County Employees.

E. Framework Data, System Implementation and State-wide Standards

1. Geographic Positioning Reference Framework

The County has completed 95% of the remonumentation of the PLSS for section corners. The county has GPS technology to obtain the coordinates of the remonumented section corners. Approximately 30% of the corners

have GPS Coordinates. All work meets the requirements set forth by state statutes.

2. Orthoimagery and Georeferenced Image Base Data

Photogrammetric base maps have been developed/updated from Digital Orthophotos taken the spring of 2000 and updated in 2005.

County has acquired the Digital Raster Graphics that represent the USGS 7.5 minute Quadrangles.

The County has digitally scanned a substantial number of years of historical aerial photographs and can access these via the GIS.

3. Elevation Data Products and Topographic Base Data

A Digital Elevation Model (DEM) that is sufficient to support orthophotography generation was developed for the 2000 flight and is being utilized for future flights.

10' county-wide contours have been developed from the most current USGS 10 meter DEMs.

4. Parcel Mapping

The County has completed 100% of the county tax parcels.

Approximately 85,000 parcels are in the county. The mapping was originally based on deeds and plats using digitizing procedures. All layers pertaining to parcel mapping are topologically correct. This is "Index" parcel mapping suitable for use for planning purposes.

The County parcel ID numbering system fully conforms to the WLIP Parcel Numbering System standards.

The County is working with area surveyors and developers to; first, provide the County with information based on the County's database and maps. Second, the county will be encouraging new work being done to be provided to the County in a digital format in the County's coordinate system.

5. Parcel Administration and Assessment Information

The County's parcel information is integrated with other land related databases in the County utilizing the parcel ID. Tax data, Exempt lands, Assessment Class, Site Address, Transactions and Title information can be accessed utilizing the parcel ID. Currently there is integration with the Imaging System and mapped parcel data, via web applications for parcel map viewing and online land records. This access is for internal users and paid subscribers. The WLIP Parcel Identification Numbering System is utilized. This is "Index" parcel mapping suitable for use for planning purposes per the WLIP's Digital Parcel Mapping Standard.

6. Street Address and Street Network System

The County has street centerlines, bridges, and road edges. Rights-of-

Way are being developed from parcel data. A full model street address range data set has been developed using these centerlines. Site street addresses are a part of the parcel land record database. A point address layer for building location for geocoding other data sets and e911 purposes has been developed. A unique road name database is maintained to assist with road naming decisions. Some Place Features have been developed such as: Schools, Churches, Libraries, Town Halls, Fire/Police Departments, Hospitals and Statistically Census Named Places.

7. Hydrography, Hydrology and Wetlands Mapping

The County has acquired digital wetlands maps from the Wisconsin Department of Natural Resources (WIDNR) and converted them to the Marathon County Coordinate System. The County has obtained the latest 12 Digit HUC digital Watersheds via the NRCS-WIDNR. The County has Digital Hydrography developed from current Digital Orthophotography as well as the WIDNR Digital Hydrography.

8. Soils Mapping, Land Cover and Other Natural Resources Data

The County has acquired digital soils maps from the Natural Resources Conservation Services (NRCS) and converted them to the Marathon County Coordinate System. The land cover, geology, and watershed data sets have all been acquired from State agencies. County forests are maintained by the County. County-wide forest cover has been developed from Digital Orthophotography. Detailed watershed data is developed and maintained by the County. These data sets adhere to WIDNR standards.

9. Land Use Mapping

The County has created land use/cover mapping utilizing the 2000 Orthophotography data and a local government classification system. A Future Land Use dataset will be developed as part of the Comprehensive Planning process. 2008 land use/cover mapping is being developed from 2008 NAIP imagery. 2010 land use/cover will be created utilizing the county-wide leaf off 2010 imagery.

10. Zoning Mapping

The County zoning maps are in a digital format and are available for all the unincorporated municipalities that have adopted the County Zoning Ordinance. The County now maintains the digital zoning maps for those towns with Independent Zoning as a result of the Comprehensive Planning process. Zoning maps (pdf) for the Independently Zoned towns have been placed on the county website. Zoning attribute types for the County Zoned municipalities have been added to the Land Record System database.

Shoreland zoning is being worked on as a database not yet available in digital form. The latest FEMA floodplain maps have been approved and are incorporated into the GIS. A county-wide cemetery dataset has been developed.

11. Election and Administrative Boundary System

The County maintains all Civil Division boundaries as well as School, Supervisory and Voting districts. Emergency Service Areas, Zip Codes, County Parks and Forest units are also maintained digitally. Some utility type boundaries such as Metropolitan 208 Sewer Service Area are maintained digitally. U.S. Census bureau information is also incorporated into the County GIS. Taxing Lake Districts and Tax Incremental Finance Districts are part of the Land Records tabular database.

12. Critical Infrastructure and Facilities Management

The County currently has maps and plans of some local utility operators, and transit operators (Metro Ride). The GIS contains datasets for Active Railroads, Snowmobile Trails, Recreational Trails, Major Airports, Active Landfills, Hospitals and Clinics, Police/Fire Stations and Bridges overseen by the County Highway Department.

13. Data Base Design and System Implementation

Timeline - The timelines for data set development are determined by the needs assessment and design evaluation for any given data set.

Metadata and Metadata Quality - The County has developed Metadata for most of the GIS layers and will adhere to established quality standards such as FGDC.

Design Evaluation - County GIS personnel assess the database functionality and design through an ongoing process and make recommendations to the County Land Information Council.

Security/Privacy - The City-County Data IT Commission manages data security and privacy access for Marathon County data.

F. Public Access

Marathon County has informal understandings to share/exchange land information with many communities within the County and with adjacent counties. The County also has data exchange/cost agreements with private firms, utilities, and state agencies.

The public can access information from the Register of Deeds office, mainly

deeds, and parcel information with tax data by using public terminals located in the Register of Deeds and the Property Description offices in the County Courthouse. There are also three County departments (CPZ, Parks Forestry Recreation and County Clerk) that can assist the public in obtaining information and maps through the County GIS.

The public has access to hard copy and digital information for established copying costs. The County adheres to the Wisconsin Open Records Law and provides to the public the best it can, its digital information by utilizing similar file formats by the entities requesting the information and the use of a CD writer, or Internet technology. Any issues related to system security are managed by the City/County IT Commission.

G. Integration and Cooperation

Marathon County has informal understandings to share/exchange land information with many communities within the County and with adjacent counties. The County also has data exchange/cost agreements with private firms, utilities, and state agencies.

The County will attempt to share/exchange data with communities, or firms whenever possible. The current County policy is to provide information at a per hour cost for staff and computer time to copy, convert, or modify existing data with a materials cost to provide the data.

The County has provided digital index parcel and planimetric data to several communities within the County and many entities requesting information and data from outside the County.

The County has acquired digital data from multiple sources from outside the County, and will continue to pursue opportunities to jointly acquire or develop land information data. The acquisition of digital orthophotography is being coordinated with other communities to obtain, in some cases, a higher resolution, lower cost product for those communities.

The County has a number of data sharing/exchange arrangements with local and state governmental agencies and local firms in the form of Memorandums of Understanding and/or formal data sharing/exchange agreements. The County Land Information Council addresses any requests for Land Information related issues

H. Communication, Education, Training and Facilitated Technical Assistance

1. Communication, Education, Training and Technical Assistance

The County currently has Internet access for specific individuals and departments. An intra- and Internet e-mail access is available for all county employees. Email is used by most individuals.

All County departments that deal with Land Information are represented on the Land Information Council or are invited to the meetings. The Council oversees the county land information programs, projects, and monetary issues. The City of Wausau GIS personnel are also invited to attend the Land Information Council meetings to provide communication links between the City and County.

All employees that utilize the GIS software have been trained and are continuously trained in any new advancements. Key employees attend conferences and working groups to supplement training courses then distribute new information to other employees.

The WLIP annual Training Grant has been utilized by County staff to attend land information related conferences and training sessions.

I. Administrative Standards Not Associated With Foundational Elements

1. The County agrees to observe and follow the statutes relating to the Wisconsin Land Information Program and other related statutes.
2. The County agrees to permit the Wisconsin Department of Administration access to books, records, and projects for inspection and audit.
3. The County agrees to complete the GIS Inventory Survey (survey 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 the County, including continued eligibility for Program funding. A peer review process will be used to assess plan acceptability by the land information community.