Marathon County Mission Statement: Marathon County Government serves people by leading, coordinating, and providing county, regional, and statewide initiatives. It directly or in cooperation with other public and private partners provides services and creates opportunities that make Marathon County and the surrounding area a preferred place to live, work, visit, and do business. (Last updated: 12-20-05)

Members: Gary Hetzer – Land Information Officer, Audrey Jensen, Michael Sydow, Linda Schroeder, Gerry Klein, Christopher Fieri, Jim Seefeldt, Jason Plaza

Agenda Items:

1. Call to Order;

Policy Discussion and Possible Action:

2. Approve minutes of December 12, 2014 meeting
3. Discussion of membership/Realtor
4. Land Records System Replacement – Rebecca Frisch
   a) Work Group Update
   b) Capital Improvement Program requests (Land Records & Tract Index) and proposed use of retained fees
5. Update of the 2010-2014 Land Records Modernization Plan
   a) Staff involvement (CPZ)
   b) State uniform instructions
   c) Timeline
6. Retained Fees Funding Requests
   a) ESRI parcel editing class for Real Property Lister
   b) Section corner Global Positioning System (GPS) project with County Surveyor
7. Next meeting date: Tentatively October 2015.
8. Adjourn.

Any person planning to attend this meeting who needs some type of special accommodation in order to participate should call the County Clerk’s Office at 715-261-1500 or e-mail infomarathon@mail.co.marathon.wi.us one business day before the meeting.
Marathon County
Land Information Council
Minutes
Friday, December 12, 2014
Employee Resources Conference Room
Courthouse, Wausau, WI

Attendance: Present Not Present Attendance Present Not Present
Jim Seefeldt .................... X Michael Sydow ............... X
Lorraine Beyersdorff ........ X Jason Plaza .................... X
Linda Schroeder .............. X Gary Hetzer ..................... X
Gerry Klein ...................... X Emily Pierce .................... X

Others Present: Becky Frisch, Dave Mack, Preston Vande Voort – Conservation, Planning and Zoning (CPZ), Julie Henrichs – CCIT; Audrey Jensen – Treasurer’s Office; Peter Herreid – Dept. of Administration (DOA) Grant Administrator

1. Call to Order.
Meeting was called to order by Hetzer at 1:00 pm.
2. Approve minutes of January 16, 2013 meeting.
   Action: MOTION / SECOND BY PIERCE / SEEFEELDT TO APPROVE THE MINUTES OF THE JANUARY 16, 2013 MEETING. MOTION CARRIED ON VOICE VOTE, NO DISSENT.
   Discussion: Peter Herried, DOA Grant Administrator, was introduced and presented information on the implications of Act 20, the Statewide Parcel Initiative, and 2014 WLIP report. Changes resulting from Act 20 included:
   - Initiative to create a statewide digital parcel map;
   - Increased Base Budget and Training & Education Grant Eligibility;
   - Increase in Land Information Fund Revenue;
   - Update frequency of county land information plans;
   - Penalties and deadlines.
   Discussion included:
   - Status of Marathon County’s efforts to re-monument corners and correct the county’s parcel maps on a town by town basis utilizing in-house staff and insufficient funds (GPS 1 town/year);
   - LiDAR was funded through the County’s Capital Improvement Program and has resulted in a high demand for product from both private (engineering firms) and public entities;
   - Rural addressing will be part of the 2016 land records update;
   - The County only maintains zoning maps for those towns with county administered zoning;
   - Land use maps – a flight is scheduled for 2015 and the County’s comprehensive plan/land use map will be updated by end of 2015;
   - On-line land records images available to the public through a subscription;
   - Agricultural Enterprise Area (AEA) maps were submitted to DATCP;
   - AEA zoning was worked on in 2014;
   - The DOA to create the Act 20 Version 1 Statewide Parcel Map through a coordinated effort with counties and requires counties to submit information to DOA in a standardized format;
     - Need for disclaimer that the statewide parcel map information may contain inaccuracies between the state’s information and county level information;
     - Concern that inquiries would not be directed to the county that maintains the data;
     - Statewide parcel map would have limited attribute layers;
     - 2014 implementation of a statewide parcel layer for broadband with the goal to identify gaps and provide more complete coverage utilizing federal funds;
   - Grant and other funding:
     - Act 20 put all WLIP program revenue into a non-lapsing segregated continuing appropriation;
o Increased annual Training & Education grant funding – from $300 to $1000/county;
o Increase in the Base Budget eligibility threshold – from $50,000 to $100,000;
o Strategic Initiative grant eligibility of $50,000/county beginning in 2016 – if specified benchmarks are met, the County has discretion to use the grant funds for other purposes consistent with its land information plan;
o As of 1/1/15 $7 of each register of deeds document recorded will be sent to DOA which will be returned to counties in the form of grants;
o Recording fees set at $30 for all counties;
o Social security redaction fee – counties can retain the $5 portion and completion of redaction projects allows counties’ discretion on expending the funds;

• A draft update to the land records modernization plan will need to be submitted to DOA by 1/1/16;
• DOA will be hiring a GIS administrative officer;
• 2014 WLIP report – completed and submitted on time.

Action: **NONE NEEDED AT THIS TIME.**
Follow Through: The council will continue to monitor the development of Act 20 and related initiatives.

4. **Land Records System Presentation – Julie Henrichs.**
Discussion: The information available on the land records system was demonstrated and, depending on the department, includes information such as property owner names, legal descriptions, assessments, special assessments, parcel status, zoning, and sanitary permits. When the system is updated, all the information currently in the system would have to be transferred to the new platform. Not all features are available to the public; the public currently cannot search by owner’s name. Surveyors obtain information from CPZ as cost of subscription service outweighs benefits; CPZ only charges for copies. Discuss the possibility of creating a second tier subscription service and the need for statutory charges to recoup costs of the system.

Action: **NONE NEEDED AT THIS TIME.**
Follow Through: Future discussion topic – second tier subscription service and statutory charges.

5. **Miscellaneous Reports – Digital Orthophotos, Budget, GIS Conversion – Gary Hetzer**

Discussion:
- **Digital Orthophotos:** The County will be flown in spring 2015 with the Wisconsin Regional Orthophotography Consortium (WROC) at 1’ pixels. The flight cost ($150,000) is funded through the County’s Capital Improvement Program (CIP). Some participating municipalities are being flown at 3”-6” pixels (c Wausau, v Weston and Kronenwetter, parts of Rib Mountain).
- **Budget:** Approximately $200,000 is in the $6 account and approximately $405,000 is in the $2 account as of December 1st 2014, the $2 account currently funds the GIS coordinator position.
- **GIS Conversion:** Moving to a virtual server environment, currently doing 2 environments, upgraded ERSI software (latitude projects) and web mapping software. Phase 2 is converting county GIS data, ERSI assisted in plan development. Anticipated completion by end of first quarter 2015.

Action: **NONE NEEDED AT THIS TIME.**
Follow Through: None.

6. **Adjourn.**
There being no further business to discuss, **MOTION / SECOND BY KLEIN / PIERCE TO ADJOURN THE MEETING AT 3:00 P.M. MOTION CARRIED BY VOICE VOTE, NO DISSENT.**

Submitted by:
Gary Hetzer
GIS Coordinator
December 22, 2014
GH/ljs
**MARATHON COUNTY LAND RECORDS SYSTEM REPLACEMENT**

**Purpose:**
The purpose of this document is to outline and describe the current status of the Marathon County Land Records System and detail the future needs of land records management. The Conservation, Planning and Zoning Department (CPZ) in cooperation with the City County Information Technology (CCIT), intend to work with other departments who rely on land records to identify the key business functions that the land records system must be able to support. The goal is to have an implemented modernized land records software/hardware system that meets the business needs of Marathon County and interfaces with other key softwares.

**Current Situation:**
Marathon County currently uses a 20+ year old in-house developed land records management computer system (software) that is used by a multitude of departments/entities. This system is in an outdated technology format (Green Screen) that must be supported by CCIT. Programmers for this vintage system are not easily replaced as staff leave or retire. In addition, younger users are not familiar with this style of computer interface which increases training time. To increase the capacity and enhance the existing vintage system, specialized programming is required.

**Background/Historical Information:**
Marathon County’s Land Records System is a database program that was developed in 1993 on an IBM AS/400 platform, written in COBOL & COBOL ILE language. At that time, the program philosophy was to normalize the data (data was only stored once in the database and the data could be used by many but “owned” by one), make all the screens look similar, and ensure real time data entry (once data is entered, it is readily accessible to all users). This system contains 500 programs, 400 reports and 400 tables/files and has been sold to other municipalities.

**Primary Functions:**
The primary functions of the Land Records System are:
- Property Listing (Landowner names, mailing addresses, parcel numbers, legal descriptions, street names and plat names, miscellaneous detailed land information reports)
- Taxes (Real and Personal) (Assessments, special assessments/charges, tax lien processing, tax collections, tax rates, tax bill production, municipality settlements, state credits)
- Permitting and Enforcement Tracking (nonmetallic mining, private onsite waste systems, zoning, permit violations, farmland preservation contracts, farmland preservation zoning)
- Misc. Land Records (water lateral tracking, miscellaneous fee tracking, mortgage/TIF loans, rental licensing, planning density tracking, special assessment billing, yard waste site address verification)
- Collections (Tax collections, mortgage payments, lock box payment processing)
- Supplies land records data to County Web Site and online mapping
- Dog & Cat Licenses
- Clerk Licenses
Users of the System:

The primary internal and other governmental users of the Land Records System are:
- Marathon County (Real Property Lister, Treasurer, Register of Deeds, Conservation, Planning and Zoning, Sheriff/911, Emergency Management, Parks, Recreation, and Forestry, Health, Highway, District Attorney)
- City of Wausau
- Village of Weston
- Lincoln County
- City of Merrill
- City of Tomahawk
- Municipal Governments (Clerks, Treasurers, Assessors, Public Works, Law Enforcement)
- Federal, Regional, and State agencies

The primary external users of the Land Records System are:
- Subscribers via [http://www.co.marathon.wi.us/online/](http://www.co.marathon.wi.us/online/)
- Septic Pumper reporting via [http://www.co.marathon.wi.us/applications/sanipump/](http://www.co.marathon.wi.us/applications/sanipump/)
- Attorneys/Bankruptcy Attorneys
- Abstractors/Title Companies
- Appraisers
- Real Estate Brokers/Associates
- Financial Institutions
- Mortgage Companies
- Contractors
- Engineers
- Surveyors
- Private Investigators
- General Public

Connection To Other Systems and Processes:

Other systems currently connected to Land Records data include:
- Tract Index (input system)
- GIS (Geographical Information System) has connections for mapping analysis and displaying maps and ownership information to the web for both internal and external users.
- The Online Land Records Web based interface via the County and City websites for Land Records Property Reports.
- Local assessors receive digital data exports and return updated assessment data to the Land Records System.
- Local municipalities receive digital data exports and return updated tax receipt information.
- Yearly assessment rolls, tax rolls, and tax bills generated for all municipal officials.
- The Wisconsin Department of Revenue receives a multitude of digital data exports pertaining to Land Records data.

Specific Aspects/Concerns with the Current System

The current IBM iSeries (AS400) Land Record System is a 20+ year old application developed and written in-house. This system has the following concerns:
- CCIT is standardizing operating platforms for databases and applications. The Land Records System is one of the last systems remaining on the iSeries computer, which is a single use server that is maintained only for this application and is not cost effective. The other two systems (Tract Index – Register of Deeds; Municipal Court Citation Tracking – City of Wausau) remaining have submitted Capital Improvement Project requests for replacement.
• Mobile applications, access to the system in the field, are very limited and inefficient.
• Training on the interface (Green Screen) for data entry and Land Record maintenance is not intuitive to the new generation of applications or users.
• There is no “Live Link” to the data as nightly digital copies have to be created to be used in other systems such as GIS.
• The system has become expensive to maintain and requires COBOL programmers that are not easily replaced as staff leave or retire.
• Limits compatibility with other modern software needed by internal and external users.

Summary

The existing outdated land records system needs to be replaced with a modernized land records software system that meets the business needs of Marathon County and interfaces with other key software. In order to determine the key business functions that must be met with a replacement system, Rebecca Frisch, Conservation, Planning and Zoning Department Director, and Julie Henrichs, City County Information Technology Commission formed a workgroup consisting of county staff that currently utilizes the Land Records System software. This workgroup will be meeting over the next 6 months to complete an inventory of Marathon County’s land records system business needs, determine current external users business needs, review other counties systems, and conduct other activities/processes in order to determine the best recommendation for a system replacement. Rebecca Frisch and Julie Henrichs will communicate regularly collaborate with Administration, CCIT, standing committees, users of the system and the Land Information Council to provide information on the workgroups assessment and outcomes. The goal is to have complete specifications for a new land records system developed by December 31, 2015. These specifications would then be used to develop a Request for Proposal for the replacement land records system with implementation of the new system by fall of 2016.
LAND RECORDS MODERNIZATION PLAN

MARATHON COUNTY, WISCONSIN
2010 - 2014
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Prepared by
Marathon County Conservation, Planning and Zoning Department
I. EXECUTIVE SUMMARY

A. The Contact Person is:

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Marathon County Conservation, Planning & Zoning Department (CPZ)
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Wausau, WI 54403
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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 Statues 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.
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.
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EXECUTIVE SUMMARY

This document, the 2015 Uniform Instructions for Preparing County Land Information Plans, sets forth the directions and minimum plan elements for county land information plans. The format of these instructions is designed to assist counties in organizing their plan layout. Background information is provided for each section, which the county may choose to retain in their own plan. Examples are included but are only intended as guides. Where the instructions ask counties to address certain required topics, this is noted.

Executive Summary Directions

Plans should begin with an executive summary, which explains the main components and takeaways from the plan in one page. Write for a general audience, not a technical audience. Remember that executive level decision-makers, such as county board members, may be a key audience for the executive summary. The following structure is recommended, but you may choose to adapt the summary in any way you wish.

Paragraph 1: About this Document. The first paragraph is broad. It lays out what the plan is in the most general terms. Clearly state the purpose(s) of the plan right away. You are welcome to copy from the example on the next page.

Paragraph 2: WLIP Background. As the plans are mandated by statute for participation in the WLIP, it is important to provide brief context on the program for unfamiliar readers. Again, you may use the template paragraph. You may also choose to alter the paragraph to be specific to your county’s history of WLIP funding.

Paragraph 3: Land Information in the County. Broadly describe how land records and GIS data are essential to the county and county services.

Paragraph 4: Three-Year Mission Statement. Include a mission statement for the land information office. A mission statement describes what an organization seeks to do. The mission statement can broadly mention your most significant projects, but details on how to achieve this mission through concrete goals and objectives should be laid out in Chapter 4.

Three-Year Mission Statement – Examples

- In the next three years, Badger County’s Land Information Office strives to be recognized for its exceptional webmapping site, gains in governmental efficiencies by broadening the utilization of GIS, improvements in parcel mapping accuracy, and responsiveness to meeting the land records needs of residents and businesses.
- The Land Information Office will provide efficient and high quality services to its residents and county departments by maintaining land records in an efficient manner, adopting standards to streamline the use of GIS data across departments, and provide services such as a more user-friendly webmapping service.
- Badger County’s Land Information Office will provide geospatial data for the county’s comprehensive planning process, inform future land use decision making, partner with county departments to integrate land records, and improve public access to land records online.

Paragraph 5+: Projects Summary. Recap your major projects from Chapter 4. You can use a bulleted list, a table, or perhaps list them in general terms in paragraph form.
Executive Summary – Example

About this Document. This document is a land information plan for Badger County prepared by the land information officer (LIO) and the land information council. By Wisconsin statute, “a countywide plan for land records modernization” is required for participation in the Wisconsin Land Information Program (WLIP). The purpose of this document is twofold: 1) to meet WLIP funding eligibility requirements necessary for receiving grants and retaining fees for land information, and 2) to plan for county land records modernization in order to improve the efficiency of government and provide improved government services to businesses and county residents.

WLIP Background. The WLIP, administered by the Wisconsin Department of Administration, is funded by document recording fees collected by register of deeds at the county-level. In 2015, Badger County received $__k in WLIP grants and retained a total of $__ million in local register of deeds document recording fees for land information. Beginning in 2016, WLIP Strategic Initiative grants are projected to increase the county land information budget by $50k per year.

This plan lays out how funds from grants and retained fees will be prioritized. However, as county budgets are determined on an annual basis with county board approval, this plan provides estimated figures that are subject to change and are designed to serve planning purposes only.

Land Information in Badger County. Land information is central to county operations, as many essential services rely on accurate and up-to-date geospatial data and land records. A countywide land information system supports economic development, emergency planning and response, and a host of other citizen services. The Badger County land information system integrates and enables efficient access to information that describes the physical characteristics of land, as well as the property boundaries and rights attributable to landowners.

Mission of the Land Information Office. In the next three years, Badger County’s Land Information Office strives to be recognized for its exceptional webmapping site, gains in governmental efficiencies by broadening the utilization of GIS, improvements in parcel mapping accuracy, and responsiveness to meeting the land records needs of residents and businesses.

Land Information Office Projects. To realize this mission, in the next three years, the county land information office will focus on the following projects:

1. Indexing of documents by geography in GIS
2. Countywide integration of tax/assessment data with parcel polygons
3. 100% PLSS remonumentation with survey grade GPS coordinates
4. Expansion of the use of mobile GPS/GIS technology
5. Document imaging improvements
6. Website development and hosting for improved access to land records

The remainder of this document provides more details on Badger County and the WLIP, summarizes current and future land information projects, and reviews the county’s status in completion and maintenance of the WLIP map data layers known as Foundational Elements.
1 INTRODUCTION

In 1989, a public funding mechanism was created whereby a portion of county register of deeds document recording fees collected from real estate transactions would be devoted to land information through a new program called the Wisconsin Land Information Program (WLIP). The purpose of the land information plan is to meet WLIP requirements and aid in county planning for land records modernization.

The WLIP and the Land Information Plan Requirement

In order to participate in the WLIP, counties must meet certain requirements:

- Update the county’s land information plan at least every three years
- Meet with the county land information council to review expenditures, policies, and priorities of the land information office at least once per year
- Report on expenditure activities each year
- Submit detailed applications for WLIP grants
- Complete the annual WLIP survey
- Subscribe to DOA’s land information listserv
- Meet a June 30, 2017 deadline to post certain types of parcel information online

Any grants received and fees retained for land information through the WLIP must be spent consistent with the county land information plan. The Uniform Instructions for Preparing County Land Information Plans are designed as a template, but leave flexibility as to how counties may choose to address the minimum plan components. The county is able to include as much detail as necessary to make the planning process useful at the local level.

Act 20 and the Statewide Parcel Map Initiative

A major development for the WLIP occurred in 2013 through the state budget bill, known as Act 20. It directed the Department of Administration (DOA) to create a statewide digital parcel map in coordination with counties.

Act 20 also provided more revenue for WLIP grants, specifically for the improvement of local parcel datasets. The WLIP is dedicated to helping counties meet the goals of Act 20 and has proposed that funding be made available to counties in the form of Strategic Initiative grants to be prioritized for the purposes of parcel dataset improvement. For Strategic Initiative grant eligibility, counties will be required to apply WLIP funding toward achieving certain statewide objectives, specified in the form of “benchmarks.” Benchmarks for parcel data—standards or achievement levels on data quality or completeness—are determined through a participatory planning process and will be detailed in future WLIP grant applications.

County land information plans were initially updated every five years. However, as a result of Act 20, counties must update and submit their plans to DOA for approval every three years. Thus, the minimum planning horizon for these documents is three years. The plan may incorporate a planning horizon that is longer if the needs and priorities of the participants warrant.

The first post-Act 20 required update deadline for draft county land information plans is December 29, 2015. Final plans are due March 31, 2016.
County Land Information Plan Timeline

January – April 2015: DOA leads workgroup to update plan instructions
May 2015: Public review and comment of draft plan instructions
June 2015: Instructions finalized
June – December 2015: Counties create draft land info plans
December 29, 2015: Draft county plans complete
January – March 2016: Plan review and approval process
March 31, 2016: Final county land info plans due

County Land Information System History and Context
In Chapter 1 of the plan, the county should provide an overview of the county’s land records modernization efforts, dating back to when the WLIP was established in 1989 if possible. You may be brief here, or provide as much detail as desired.

Plan Participants and Contact Information
Another requirement for participation in the WLIP is the county land information council, established by legislation in 2010. The council is tasked with reviewing the priorities, needs, policies, and expenditures of a land information office and advising the county on matters affecting that office.

According to s. 59.72(3m), Wis. Stats., the county land information council is to include:
- Register of Deeds
- Treasurer
- Real Property Lister or designee
- Member of the county board
- Representative of the land information office
- A realtor or member of the Realtors Association employed within the county
- A public safety or emergency communications representative employed within the county
- County surveyor or a registered professional land surveyor employed within the county
- Other members of the board or public that the board designates

The land information council must have a role in the development of the county land information plan, and DOA requires county land information councils to approve final plans. A record documenting county land information council approval should be included in the final submission of the plan to DOA. County board approval of plans is encouraged but not required.

A county may amend a plan with updates or revisions as appropriate. If amended, a digital copy of the amended plan and record of land information council approval should be sent to the WLIP.
This plan was prepared by the county LIO, the Land Information Council, and others as listed below.

### County Land Information Council and Plan Workgroup

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Affiliation</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jodi Helgeson</td>
<td>Register of Deeds, Land Information Officer</td>
<td>Adams County Land Information Office</td>
<td><a href="mailto:jhelgeson@co.adams.wi.us">jhelgeson@co.adams.wi.us</a></td>
<td>608-339-4206</td>
</tr>
<tr>
<td><em>County Treasurer</em></td>
<td>Treasurer</td>
<td>Adams County Land Information Office</td>
<td><a href="mailto:msmith@co.adams.wi.us">msmith@co.adams.wi.us</a></td>
<td>608-333-1234</td>
</tr>
<tr>
<td>*</td>
<td>Real Property Lister</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>County Board Member</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Land Information Office Representative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Realtor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>Public Safety Officer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*</td>
<td>County Surveyor</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Land Information Council Members designated by asterisk
2 FOUNDATIONAL ELEMENTS

Counties must have a land information plan that addresses development of specific datasets or map layer groupings historically referred to as the WLIP Foundational Elements. Foundational Elements incorporate nationally-recognized “Framework Data” elements, the major map data themes that serve as the backbone required by users to conduct most mapping and geospatial analysis.

In the past, Foundational Elements were selected by the former Wisconsin Land Information Board under the guiding idea that program success is dependent upon a focus for program activities. Thus, the Uniform Instructions place priority on certain elements, which must be addressed in order for a county land information plan to be approved. Beyond the county’s use for planning purposes, Foundational Element information is of value to state agencies and the WLIP to understand progress in completion and maintenance of these key map data layers.

The list of WLIP’s Foundational Elements has evolved with each update of the county land information plan instructions. They are a guideline of what counties need to address in their plans at a minimum. As the list of layers in this document is not exhaustive, counties are welcome to insert additional layers for geospatial data categories stewarded by the county or municipalities that are of importance to local business needs.

Foundational Element Subheadings
For each layer listed under a Foundational Element, the plan should address: 1) Layer Status, 2) Custodian, 3) Maintenance, and 4) Standards.

If an element or layer does not apply to your county, please state why it is not applicable.
### PLSS Layer Status

For the PLSS Foundational Element, the table below documents Layer Status

<table>
<thead>
<tr>
<th>PLSS Layer Status</th>
<th>Status/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of PLSS corners (section, ¼, meander) set in original government survey</td>
<td></td>
</tr>
<tr>
<td>Number and percent of PLSS corners that have been remonumented</td>
<td></td>
</tr>
<tr>
<td>Number and percent of remonumented PLSS corners with survey grade coordinates (see below for definition)</td>
<td></td>
</tr>
<tr>
<td>Number and percentage of survey grade PLSS corners integrated into county digital parcel layer</td>
<td></td>
</tr>
<tr>
<td>Number and percentage of non-survey grade PLSS corners integrated into county digital parcel layer</td>
<td></td>
</tr>
<tr>
<td>Percentage of PLSS corners that have digital tie sheets (whether or not they have corresponding coordinate values)</td>
<td></td>
</tr>
<tr>
<td>Digital tie sheets available online? Yes or No</td>
<td></td>
</tr>
<tr>
<td>Approximate number of PLSS corners believed to physically exist based on filed tie-sheets or surveys, but do not have coordinate values</td>
<td></td>
</tr>
<tr>
<td>Approximate number of PLSS corners believed to be lost or obliterated</td>
<td></td>
</tr>
<tr>
<td>Total number of PLSS corners along each bordering county</td>
<td></td>
</tr>
<tr>
<td>Number and percent of PLSS corners remonumented along each county boundary</td>
<td></td>
</tr>
<tr>
<td>Number and percent of remonumented PLSS corners along each county boundary with survey grade coordinates</td>
<td></td>
</tr>
<tr>
<td>Does your county collaborate with or plan to collaborate with neighboring counties for PLSS updates on shared county borders?</td>
<td></td>
</tr>
</tbody>
</table>

### Custodian

- **Maintenance**

### Standards

- **Statutory Standards for PLSS Corner Remonumentation**
  s. 59.74, Wis. Stats. Perpetuation of section corners, landmarks.
  s. 60.84, Wis. Stats. Monuments.
  s. 236.15, Wis. Stats. Surveying requirements.

- **Wisconsin County Surveyor’s Association survey grade standard:**
  Coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by s. 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision.
Other Geodetic Control and Control Networks

e.g., HARN, Height Mod., etc.

Layer Status
- Custodian
- Maintenance
- Standards

Parcel Mapping

Parcel Geometries

Layer Status
- State progress toward completion/maintenance
- Specify whether 100% of the county’s parcels are available in a commonly-used GIS format
- Give projection and coordinate system used
- Note whether your parcel polygon model directly integrates tax/assessment data as parcel attributes
- Specify whether you use or plan to implement the Esri Parcel Fabric Data Model, and/or Esri’s Local Government Information Model

Assessment/Tax Roll Data

Layer Status
- Include the name of software vendor(s) the county utilizes and/or who the county contracts with to prepare assessment and tax roll data and/or tax bills

Custodian
- Maintenance
- Standards

- s. 73.03(2a), Wis. Stats. Department of Revenue (DOR) – Powers and duties defined.
  Department of Revenue Property Assessment Manual – Chapter 5 and DOR format standard requested by DOR for assessment/tax roll data
- s. 59.72(2)(a), Wis. Stats. Presence of all nine “Act 20” attributes
- s. 59.72(2)(a), Wis. Stats. Crosswalk of attributes
### Non-Assessment/Tax Information Tied to Parcels

e.g., permits, easements, non-metallic mining, brownfields, restrictive covenants

#### Layer Status

- Custodian
- Maintenance
- Standards

#### ROD Real Estate Document Indexing and Imaging

**Status**
- **Grantor/Grantee Index.** Describe.
- **Tract Index.** Give status and specify whether tract indexing is parcel PIN-based or PLSS-based. Also specify what sort of documents the county’s tract indexing encompasses.
- **Imaging.** Describe.

**Custodian**
- County Register of Deeds

**Maintenance**

**Standards**
- s. 59.43, Wis. Stats. Register of deeds; duties, fees, deputies.
- ch. 706, Wis. Stats. Conveyances of real property; Recording; Titles.

### LiDAR and Other Elevation Data

#### LiDAR

**Layer Status**
- State progress toward completion/maintenance
- Specify the accuracy, post spacing, contractor’s standard, etc. if known

**Custodian**

**Maintenance**

**Standards**

LiDAR Derivatives
  e.g., terrain, contours, digital elevation models, etc.
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Other Types of Elevation Data
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Orthoimagery

Orthoimagery
Layer Status
  • State progress toward completion/maintenance
  • Specify currency of imagery, the resolution, contractor’s standard, and the update cycle
  • Specify whether county participated in WROC 2015
  • Give next year of planned flight that occurs after 2015
Custodian
  •
Maintenance
  •
Standards
  •

Historic Orthoimagery
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Other Types of Imagery
  e.g., oblique, infra-red, etc.
Layer Status
  •
Custodian
  •
Address Points and Street Centerlines

Address Point Data
Layer Status
• Custodian
• Maintenance
• Standards

Building Footprints
Layer Status
• Custodian
• Maintenance
• Standards

Other Types of Address Information
 e.g., address ranges
Layer Status
• Custodian
• Maintenance
• Standards

Street Centerlines
Layer Status
• Custodian
• Maintenance
• Standards

Rights of Way
Layer Status
• Custodian
Trails
  e.g., recreational trails

Land Use

Current Land Use

Future Land Use

Zoning

County General Zoning

Future land use maps are typically created through a community’s comprehensive planning process. Future land use mapping for a county may be a patchwork of maps from comprehensive plans adopted by municipalities and the county.

Zoning

County General Zoning

Maintenance
  •

Standards
  •

Trails
  e.g., recreational trails

Layer Status
  •

Custodian
  •

Maintenance
  •

Standards
  •

Land Use

Current Land Use

Layer Status
  •

Custodian
  •

Maintenance
  •

Standards
  •

Future Land Use

Layer Status
  •

Custodian
  •

Maintenance
  •

Standards
  • s. 66.1001, Wis. Stats. Comprehensive planning.

Future land use maps are typically created through a community’s comprehensive planning process. Future land use mapping for a county may be a patchwork of maps from comprehensive plans adopted by municipalities and the county.
County Special Purpose Zoning
  e.g., shoreland, farmland preservation, floodplain, and airport protection

Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Municipal Zoning Information Maintained by the County
  e.g., town, city and village, shoreland, floodplain, airport protection, extra-territorial, temporary zoning for annexed territory, and/or zoning pursuant to a cooperative plan

Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Administrative Boundaries

Civil Division Boundaries
  e.g., towns, city, villages, etc.

Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

School Districts

Layer Status
  • State progress toward completion/maintenance
  • Specify whether and how school districts are tied to parcels, and which specific school district attribute(s) are linked to parcels

Custodian
  •
Maintenance
  •
Standards
  •

Election Boundaries
  e.g., voting districts, precincts, wards, voting places, etc.

Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Utility Districts
  e.g., water, sanitary, electric, etc.
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Public Safety
  e.g., fire/police districts, emergency service districts, 911 call center service areas, healthcare facilities
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Lake Districts
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Native American Lands
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Other Administrative Districts
  e.g., county forest land, parks, etc.
Layer Status
  •
Custodian
  •
Other Layers

Hydrography Maintained by County or Value-Added
  e.g., hydrography maintained separately from DNR or value-added, such as adjusted to orthos
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Cell Phone Towers
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Bridges and Culverts
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •

Other
  e.g., pipelines, railroads, non-metallic mining, sinkholes, manure storage facilities, etc.
Layer Status
  •
Custodian
  •
Maintenance
  •
Standards
  •
3 LAND INFORMATION SYSTEM

The WLIP seeks to enable land information systems that are both modernized and integrated. Integration entails the coordination of land records to ensure that land information can be shared, distributed, and used within and between government at all levels, the private sector, and citizens.

One integration requirement is listed under s. 16.967(7)(a)(1), Wis. Stats., which states that counties may apply for grants for:

- The design, development, and implementation of a land information system that contains and integrates, at a minimum, property and ownership records with boundary information, including a parcel identifier referenced to the U.S. public land survey; tax and assessment information; soil surveys, if available; wetlands identified by the department of natural resources; a modern geodetic reference system; current zoning restrictions; and restrictive covenants.

This chapter describes the design of the county land information system, with focus on how data related to land features and data describing land rights are integrated and made publicly available.

Current Land Information System

Diagram of County Land Information System

This optional section features a diagram that documents your county’s land information system and/or the various inter-organizational workflows it encompasses.

A diagram of the county land information system might include the following offices involved with the creation and maintenance of land information:

- Land Information Officer
- GIS technician
- Register of Deeds
- Treasurer
- Real Property Lister
- Public safety or emergency communications office
- County surveyor
- Zoning administrator
- Any other departments/offices

Again, this diagram is not mandatory. An example appears on the following page.
**Figure 1. Badger County Land Information System**

**County Parcel Data Workflow Diagram**

This required section features a diagram that documents your county’s parcel mapping and tax roll process. The diagram can be general and simple. Complex diagrams are welcome, but the purpose of the parcel workflow is for WLIP staff and other readers to better understand the various aspects of parcel data creation and maintenance, which greatly vary from county to county.

The workflow diagram for parcel data should depict:
- Major components of parcel data, especially those referenced by s. 59.72(2)(a), including:
  1) parcel polygons, 2) tax roll data, and 3) zoning information
- Integration of parcel polygons with other data/attributes, if applicable
- Departments/offices/staff involved with the creation and maintenance of parcel data

Again, the diagram can be simple, like the example below.
Figure 2. Badger County Parcel + Tax Roll + Zoning Workflow
Technology Architecture and Database Design

This section refers to the hardware, software, and systems that the county uses to develop and operate computer systems and communication networks for the transmission of land information data.

Describe the county’s land information software, hardware, and website development/hosting services. You may be general or detailed in this section.

Costs associated with ongoing technology expenditures or projected expenditures can optionally be listed in Chapter 4. As a reminder, the annual “County Retained Fee/Grant Report” due to DOA at the end of the state fiscal year on June 30th provides detailed information on expenditures.

Metadata and Data Dictionary Practices

Describe the process for metadata creation and maintenance. Identify the software used to develop and provide access to geospatial metadata (e.g., ArcCatalog, Spatial Metadata Management Software, U.S. Geological Survey-developed tools, etc.). State whether the software generates metadata consistent with the FGDC Content Standard for Digital Geospatial Metadata and which, if any, fields you manually populate. If your office has a policy of minimum metadata requirements, describe it or list any mandatory metadata fields.

Municipal Data Integration Process

Describe the process by which municipal data is integrated into the county land information system. If there are exceptional or notable situations regarding municipal data integration at the county-level, describe them.

Public Access and Website Information

List websites for public access to land information, perhaps in a table format as in the example below. If your county has one single URL for multiple functions (GIS webmapping, land records search, tax parcel search, zoning, and PLSS tie sheets), make sure it is clear to the reader that one website serves as a portal and/or achieves multiple functions. If county zoning information is available online—whether through an app, PDF map, or other format—note that as well.

If applicable, describe use of contractors, consultants, and/or third-party technology for access (e.g., specific web applications, consultants, software developers, offsite hosting).

Public Access and Website Information – Example

<table>
<thead>
<tr>
<th>Type of Website</th>
<th>Software or App</th>
<th>3rd Party or Contractor</th>
<th>URL</th>
<th>Update Frequency/ Cycle</th>
</tr>
</thead>
<tbody>
<tr>
<td>GIS webmapping site</td>
<td>Software/app name</td>
<td>Vendor name</td>
<td><a href="http://saukgis.co.sauk.wi.us/">http://saukgis.co.sauk.wi.us/</a></td>
<td>Weekly</td>
</tr>
<tr>
<td>ROD land records search tools</td>
<td>Software/app name</td>
<td>Vendor name</td>
<td><a href="http://landshark.co.sauk.wi.us/LandShark/login.jsp?url=http://landshark.co.sauk.wi.us/LandShark/searchname.jsp">http://landshark.co.sauk.wi.us/LandShark/login.jsp?url=http://landshark.co.sauk.wi.us/LandShark/searchname.jsp</a></td>
<td>Daily</td>
</tr>
<tr>
<td>RPL or tax parcel site</td>
<td>Software/app name</td>
<td>Vendor name</td>
<td><a href="http://lrs.co.sauk.wi.us/AscentLandRecords/PropertyListing/RealEstateTaxParcel">http://lrs.co.sauk.wi.us/AscentLandRecords/PropertyListing/RealEstateTaxParcel</a></td>
<td>As records are updated</td>
</tr>
<tr>
<td>Zoning information (PDF or WebApp format)</td>
<td>Software/app name</td>
<td>County Planning and Zoning Administrator</td>
<td><a href="https://www.co.sauk.wi.us/cpz/official-zoning-maps">https://www.co.sauk.wi.us/cpz/official-zoning-maps</a></td>
<td>Annual</td>
</tr>
<tr>
<td>PLSS tie sheets</td>
<td>Software/app name</td>
<td>County Surveyor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In this section, you may also optionally list municipal websites serving land information data that are maintained or sponsored by municipalities within your county. If applicable, note any municipalities which display county data by accessing county servers (e.g., through county REST end points).
Data Sharing
Data Availability to Public
Describe your data sharing policy with the public. Identify your efforts to comply with Wisconsin’s Open Records Law.

Data Sharing Restrictions
List and describe any restrictions on data distribution, search, download, or data privacy policies, as well as how or where members of the public are able to learn about any data restrictions.

Government-to-Government Data Sharing
Describe any government-to-government data sharing policies and practices, if applicable.

Training and Education
Describe, in as much detail as is appropriate, the county’s strategy for training and education concerning the county’s land information system.
4 CURRENT & FUTURE PROJECTS

This chapter lists the current and future land information projects the county is currently undertaking or intends to pursue over its planning horizon. A project is defined as a temporary effort that is carefully planned to achieve a particular aim. Projects can be thought of as the means to achieving the county’s mission for its land information system.

For each project, identify:
- Project Description/Goal
- Business Drivers
- Objectives/Measure of Success
- Project Timeframes
- Responsible Parties
- Estimated Budget Information

If your county foresees or has major technology projects planned, list them in this chapter as a project. Note that projects may focus on one single Foundational Element, or they may touch upon several Foundational Elements. Remember plans can be amended in the future should other significant projects arise.

Project Subheadings

Project Title

Project Description/Goal
Describe the project or goal in 1-3 sentences. List the Foundational Elements impacted by the project at the end of the description.

Business Drivers
List the business drivers for the project, including the departments affected.

Objectives/Measure of Success
Describe the objective/measure of success for the project and any defined completion milestone(s).

Project Timeframes
Provide the start and end dates for the project, as well as any significant milestone dates.

Responsible Parties
List the staff responsible for the various aspects of the project.

Estimated Budget Information
Give an estimated budget for project costs, and the source of funding to be used. This is a projected, estimated budget to aid planning efforts. The WLIP understands that budgeting requires some flexibility. It is certainly acceptable if new funding opportunities or new projects arise after the plan is approved. Plans can also be amended to include new projects if necessary.

Individual cost information can be presented for each project, or the overall budget for all projects combined can be provided in a single table at the end of Chapter 4, as in the example on page 24.
Other Project Sections

Projects Related to Strategic Initiative Grants
Project planning should take into account that beginning in 2016, the WLIP plans to make available annual Strategic Initiative grants of $50k to all 72 counties, to be prioritized for the purposes of parcel dataset improvement.

For those counties who are planning either 1) parcel or 2) PLSS projects to be funded with WLIP Strategic Initiative grant funds, a parcel and/or PLSS plan for completion should be listed as a project.

Ongoing Costs Not Associated with a Specific Project
You may include an optional section for “Ongoing Costs,” which are costs not associated with a specific project. This may include ongoing technology expenditures like software licenses or staffing costs for general tasks like production of maps for other county departments and responding to public requests for GIS data.

Completed Projects
You may include an optional section for “Completed Projects” which might simply be a list of projects the county has accomplished since the last time the county land information plan was updated.
Project – Example

Project #1: Indexing of documents by geography in GIS

Project Description/Goal
To expand the use of document imaging and GIS to “geocode” documents to geography (such as permits) and make them available to the public via the Internet. Impacts Foundational Elements: PLSS, Parcel Mapping, and Other Layers.

Business Drivers
- County business data lacks detailed location information, making it less useful
- County land information system contains some ambiguous addresses
- Increase efficiency of Zoning Department with geocoded permits
- Call-Before-You-Dig hotline lacks detailed location information
- Need to improve routing and delivery of Social Services Department
- County surveyor need to access tie sheets in the field

Objectives/Measure of Success
- Permits 100% geocoded
- Geographically indexed apps available on the county website

Project Timeframes

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #1 start</td>
<td>–</td>
<td>May 1, 2016</td>
</tr>
<tr>
<td>Index permits</td>
<td>1 month</td>
<td>May 1–June 30, 2016</td>
</tr>
<tr>
<td>Index tie sheet and other</td>
<td>4 months</td>
<td>June 1–Sept 30, 2016</td>
</tr>
<tr>
<td>records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build apps</td>
<td>3 months</td>
<td>Oct 1–Dec 31, 2016</td>
</tr>
<tr>
<td>Project Complete</td>
<td>–</td>
<td>Dec 31, 2016</td>
</tr>
</tbody>
</table>

Responsible Parties
GIS technician (75%), Contractor to input data for index (25% for 3 months)

Estimated Budget Information
See table below.
## Estimated Budget Information – Example

<table>
<thead>
<tr>
<th>Project</th>
<th>Item</th>
<th>Unit Cost</th>
<th>Cost</th>
<th>Total Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Indexing of documents to geography in GIS</td>
<td>a. GIS technician position</td>
<td>75% of $60,000</td>
<td>45,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. GIS contractor from Company XYZ</td>
<td>$10,000</td>
<td>10,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55,000</td>
</tr>
<tr>
<td>2. Countywide integration of tax/assessment data with parcel polygons</td>
<td>a. Real Property Lister position</td>
<td>25% of $60,000</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15,000</td>
</tr>
<tr>
<td>3. 100% PLSS remuneration with survey grade GPS coordinates</td>
<td>a. Surveyor position</td>
<td>25% of $60,000</td>
<td>15,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. GPS unit</td>
<td>20,000</td>
<td>20,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>45,000</td>
</tr>
</tbody>
</table>

**GRAND TOTAL** 115,000

Note. These estimates are provided for planning purposes only. Budget is subject to change.