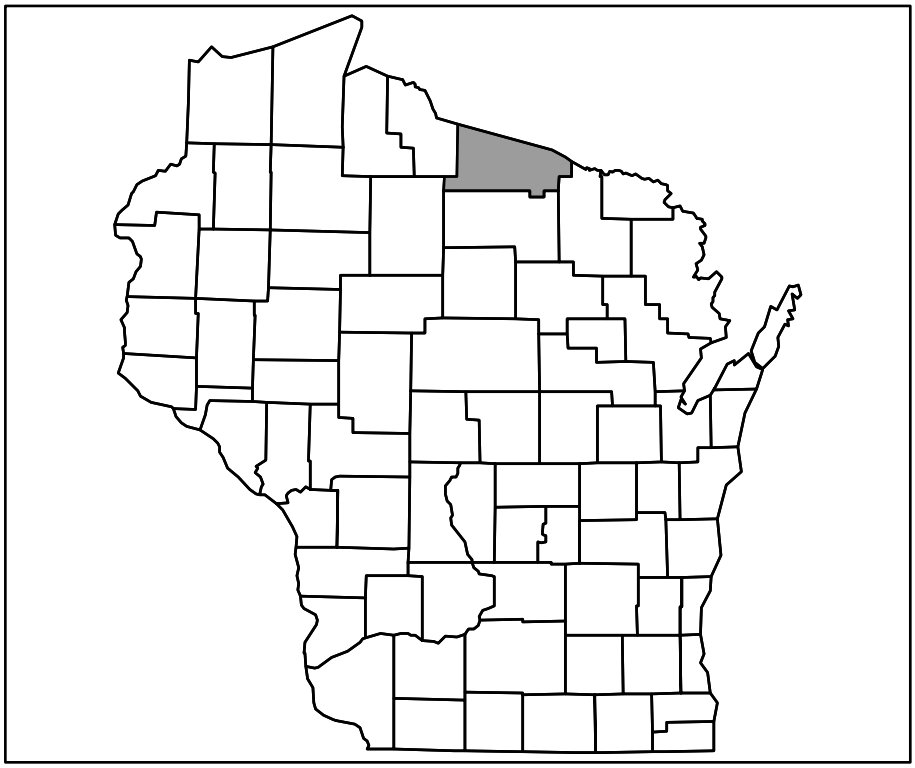
VILAS COUNTY
LAND INFORMATION PLAN
2010 - 2015



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VILAS COUNTY
LAND INFORMATION PLAN
2010-2015

I. EXECUTIVE SUMMARY

I.A. Identification and contact information

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Eagle River, WI 54521
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Web site www.co.vilas.wi.us

I.B. Participants in planning process

The Land Records Committee is comprised of five county board members who represent other committees that deal with land records. Some of these committees are: County-Tribal Concerns; Economic Development; Extension Education & Community Development; Finance & Budget Committee; Forestry, Recreation & Land Committee; Highway Committee; Law Enforcement & Emergency Management Committee; Public Health Committee; Solid Waste & Mining Committee; Tourism & Publicity Committee; and the Zoning & Planning Committee. The Land Records Committee meets six times per year to administer and guide land record projects and funding as set forth in the countywide plan. They also review projects for grants from the state land information board.

Land Records Committee: Fred Radtke, Chairperson Mary Platner, Vice Chairperson Jack Harrison Leon Kukanich Charles Rayala, Jr.	330 Court St. Eagle River, WI 54521	715-479-3600
Barb Gibson GIS Coordinator/Land Info Officer	330 Court St. Eagle River, WI 54521	715-479-3655
Adam Grassl GIS Technician	330 Court St. Eagle River, WI 54521	715-479-3790
Becky Nordine Addressing Coordinator	330 Court St. Eagle River, WI 54521	715-479-3755
Sue Schaab Kent Mapping/Surveyor Specialist	330 Court St. Eagle River, WI 54521	715-479-3684
Tom Boettcher County Surveyor	330 Court St. Eagle River, WI 54521	715-479-3684

Sherry Bierman Tax Listing Coordinator	330 Court St. Eagle River, WI 54521	715-479-3696
Joan Hansen Register of Deeds	330 Court St. Eagle River, WI 54521	715-479-3660
Dawn Schmidt Zoning Administrator	330 Court St. Eagle River, WI 54521	715-479-3620
Chris Kamps Information Technologies Director	330 Court St. Eagle River, WI 54521	715-479-3666
Larry Stevens County Forester	330 Court St. Eagle River, WI 54521	715-479-5160
Jerri Radtke County Treasurer	330 Court St. Eagle River, WI 54521	715-479-3609
Dave Alleman County Clerk	330 Court St. Eagle River, WI 54521	715-479-3600
Jim Galloway Emergency Government Coordinator	330 Court St. Eagle River, WI 54521	715-479-3690
Lt. Gary Peske 911 Coordinator/Sheriffs Dept	330 Court St. Eagle River, WI 54521	715-479-0615
Kelly Haverkampf UW Extension Community Resource Agent	330 Court St. Eagle River, WI 54521	715-479-3651
James Fischer Highway Commissioner	P.O. Box 1568 Eagle River, WI 54521	715-479-4641
Carolyn Scholl County Conservationist	330 Court St. Eagle River, WI 54521	715-479-3682
Ted Ritter Aquatic Invasive Species Project Coordinator	330 Court St. Eagle River, WI 54521	715-479-3738

I.C. Summary of Plan

The primary focus of this document is to update Vilas County's Land Records Modernization Plan as required by Wis. Stat 59.72 and the Wisconsin Land Information Board (WLIB) for continued participation in the Wisconsin Land Information Program (WLIP). The format and content of our Plan is based upon the WLIB's Uniform Instructions for Preparing County Land Information Plans dated December 2009. The outline in this document corresponds to questions or issues in the Instructions. The Plan is intended to provide county, town and city officials, state agencies, private entities, and any other interested parties with basic knowledge of Vilas County's efforts in land records modernization, its potential applications, and where the County will potentially be spending its land records fees generated from our participation in the WLIP.

Vilas County has completed the development of a digital base map to register the numerous data sets that will allow other county departments to utilize each other's information in hopes that the duplication of efforts can be minimized. Vilas County's main goal is to continue to maintain an accurate parcel base map with the available funding from the Wisconsin Land Information Program. The parcel map data set is a key feature in linking all of the other available data sets together. Other goals of the

County include updating digital orthophotography on a 5 year cycle, planimetric updates, continued assistance in the implementation of the existing wireless and wireline 911 call locating system, and to update the GPS Network of acquiring control on public land survey system (PLSS) corners, and development of new initiatives as stated in Section II. C. on page 7.

Vilas County continually attempts to improve greater public access to land information via the internet with the funds accumulated from the collection of the additional dollar retained by the County. In early 2004, an intranet GIS map server was deployed to network all of the Land Records Departments and their data throughout the courthouse. Vilas County is actively pursuing further research and development of web mapping software with existing internet service. Launch date is expected to be sometime in 2010. All of these activities will help to accelerate the Land Records Program and create an overall benefit to the Land Records Departments.

I.D & E. Web Site

Vilas County currently has a Website that can be found at www.co.vilas.wi.us which lists administrative information along with some other general information about the County. In 2008 a link on this web site address was implemented to make the County's Property Tax Assessment Information accessible. In 2009 the link between the County's Property Tax Assessment Information and the County's Parcel Base Mapping was planned to be launched to the internet. However, it was determined that as much as 75% of Vilas County residents have no internet access or dialup only access. The proposed web mapping service was slow even on a mid-speed cable connection. Vilas County is actively pursuing further research and development of web mapping software with existing internet service. Launch date is expected to be sometime in 2010. Vilas County has Address, Zoning and parcel maps in .pdf form on the county's website. These are static maps that will be updated annually.
The City of Eagle River and 10 of the towns in Vilas County have their own websites.

Town of Boulder Junction	www.townofboulderjunction.org
Town of Cloverland	www.townofcloverland.org
Town of Conover	www.townofconover.com
City of Eagle River	www.eagleriver.govoffice2.com
Town of Lac du Flambeau	www.tn.lacduflambeau.wi.gov
Town of Lincoln	www.townoflincolnvilas.com
Town of Manitowish Waters	www.mwtown.org
Town of Phelps	www.phelpswi.com
Town of Presque Isle	www.piwi.us
Town of St Germain	www.townofstgermain.org
Town of Winchester	www.winchesterwi.com

II. LAND INFORMATION PLAN

II.A. Goals and Objectives

The primary goal of Vilas County's Land Records Program is to provide the County, and other users a more efficient, accurate, and economical means of using and accessing land records. The County can accomplish this through a geographic information system (GIS) that is horizontally and vertically integrated that will tie all spatial and tabular data into one centralized system. This will avoid data duplication, versioning, and storage issues, as well as provide easy retrieval of information.

The objectives of Vilas County include improving the way County employees and the general public are able to access land records data, remonumentation of all of the available PLSS corners, maintaining the GPS Network of acquiring control on PLSS corners, maintaining the County's parcel base map, improving land records accuracy, maintaining security and confidentiality where required, minimizing costs, reducing duplication, streamlining workflows by pushing data to multiple end user applications with automated procedures, and promoting compatibility of County data with other users.

The internal and external needs of Vilas County and its priorities include the maintenance of countywide digital parcel maps, maintaining control on PLSS corners, obtaining digital orthophotography, planimetric updates, imaging of the County Surveyor's records, assist in imaging all of the Register of Deeds' recorded documents, assist in the maintenance of the wireless and wireline 911 call locating system, and an internet GIS map server linking the County's Property Tax Assessment Information to all of the available GIS data layers, and development of new initiatives as stated in Section II. C. on page 7.

The time line for implementation of items in this Plan are dependent on continuation of the Wisconsin Land Information Program (WLIP) and grant program along with the amount of retained fees collected by the Register of Deeds Office designated for land records. In addition, there are unplanned special projects and issues that come up and need to be addressed. This takes away from time and resources allocated to implement the Vilas County Plan, but are ultimately related to the activities listed in the Plan so they cannot be avoided. These unplanned projects may have an effect on the ability to adhere to established timelines, but are a necessary part of how this local government works. Where possible, general timelines are identified for implementation in sections related to New Initiatives and Foundational Elements.

At this time, the County is not having any problem with obtaining data from the state that it needs to implement this plan.

At this time, the County has the information, or can obtain the information needed to implement this Plan.

II.A.2. The County utilizes two major software formats to create and maintain spatial land records data. ArcGIS Server (Enterprise version) is the Environmental System Research Institute (ESRI) GIS software product used by the County. AutoCAD is an Autodesk software product also used by the County. Both of these computer software packages are State standards and are widely used. The County will continue to use the above listed software and commonly accepted hardware platforms to ensure all land information data is available in an industry standard format.

In early 2004, an intranet GIS map server was deployed to network all of the Land Records Departments and their data throughout the courthouse. We are actively developing an internet GIS map server to increase the availability of the county's land records data.

Vilas County's data is based on the Wisconsin Vilas County Coordinate System, which is mathematically relatable to the North American Datum (NAD) 83(91) and therefore is able to be geographically referenced for use by others.

The County employs a staff member whose duties include continual updates to parcel and survey data as new information or improvements in technology are available. The parcel data is updated to the intranet service every other month. The tax listing data is updated nightly.

The County's GIS operating system is based on a Windows 2003 Active Directory Server. The tabular land records data resides on an IBM AS/400. The GIS enterprise database design incorporates key fields, which are used to join the two systems together, thereby ensuring integration. Metadata is either maintained or planned to be created for each layer in the GIS system and the tabular land records data.

II.B. Progress Report on Ongoing Activities

PLSS Remonumentation - Remonumentation of PLSS corners has been an ongoing project for Vilas County. To date 84% of the entire County is completed. Many of the remaining corners are located in desolate areas, but we continue to obtain these remaining areas.

Filed Survey Digital Conversion - County Surveyor plans to scan all records in his office. Approximately 17,000 maps have been scanned with approximately 5,000 other maps remain to be scanned. After all maps have been scanned, the County Surveyor plans to begin scanning the Corner Forms and GLO Notes that have been filed in the County Surveyor's Office. These scanned images will be available for purchase. Developing a link between the internet parcel mapping and the scanned images is planned for the future.

Parcel Data - Topologically structured digital parcel mapping is completed in all 14 municipal towns and the City of Eagle River. The parcel data is updated as

documents are received from the Register of Deeds through the Tax Lister.

Recorded Document Digital Conversion - Prepare digital recorded land record documents for viewing on the internet by acquiring a method of preventing social security numbers from being viewed.

Orthophotography - By early 2011 we expect delivery of 12 inch color digital orthophotography from participation in the 2010 Wisconsin Regional Orthophotography Consortium.

Intranet Maps - In early 2004 an intranet GIS map server was implemented to network the Land Records Department data throughout the courthouse. Vilas County is actively pursuing further research and development of web mapping software with existing internet service. This has been a challenge to develop an internet map service that operates on dial-up connections as approximately 75% of Vilas County residents only affordable option is this type of internet service. Previous attempt to provide internet map service have failed at the "out of courthouse" testing phase, and subsequently have been scrapped to find another solution. Availability date is expected to be sometime in 2010.

Zoning - As discussed in previous plans, the Shoreland Zoning Ordinance was completed and adopted on May 7, 1999 and has been instrumental in controlling how shoreland properties have been developed. Digital zoning data sets have been developed and are kept current as amendments are passed. Digital highway setback maps are being worked on to more accurately represent the correct path of existing roadways as well as highway right of way maps to more accurately represent the ownership of parcels adjacent to highways. Zoning classifications will be available (by parcel) when the internet web service is available.

Forestry - The County manages approximately 41,000 acres of County Forest lands and has successfully created digital stand maps based on the County's GIS basemap that was discussed in our previous plan. The Forestry GIS forest recon data layers are managed and maintained within the WDNR's Forestry Reconnaissance ArcView Editor (Rave) software extension for ArcVIEW 3.x.

Land Info Publications - A Road and Water Atlas (RWA), formerly the Rural Road Directory (RRD), was developed showing all named federal, state, county, town, and private roads along with an index. The same was developed for all waterbodies using WDNR naming along with an index. The RWA is used by many departments, fire chiefs, towns, and the general public to aid in their navigation of the county road network, and to locate waterbodies within the county. The RWA is kept current, as the County's GIS is updated, and is created in small batches to minimize the potential of becoming too outdated.

Land Use - A Countywide Land Use Program was started in 1999 that either created

or produced exposure to many new GIS data layers including GPS Network, wetland inventory, land cover, land use, public and tribal lands, soils and groundwater elevation maps. Some towns contracted with North Central Wisconsin Regional Planning Commission to produce their Land Use Plans. Vilas County contracted with NCWRPC to produce the county plan. It has been adopted by the Vilas County Board on November 10, 2010 and administered by the Zoning Department. All data based on the Vilas County Coordinate System and funded predominantly by grants with some matching funds.

Base Map Data - Base map layers are updated continually, and are included in both the County GIS and wireless/wireline 911 call locating system.

E911 Addressing update - In 2005, the Vilas County Sheriff's Department implemented a CML Sentinel 911 call locating system. This system includes the XTrakker mapping software component for display of wireless (Phase 1 & Phase 2 calls) and wireline 911 calls. Where available, municipalities' addressing data was incorporated into the system with the rest of the County's data coming from the 2004-2006 GPS Addressing Project conducted by the Sheriff's Department. This system is based on the County's existing GIS and it is anticipated that there will be a period of data updates as inconsistencies are found during the 911 call taking process between the GIS data data and the 911 system. In 2007 the Vilas County Board of Supervisors approved Section 28 (Uniform Addressing System) of the Vilas County General Code. Within 10 years all of the local governments must comply with this ordinance. At this time 12 of the towns addressing systems comply with the Vilas County Address Grid and have installed approved fire number signs; 1 town is currently conducting an addressing project; 1 town has not budgeted for funding to conduct an addressing project.

Ability to support Wireless 911. In 2005, the Vilas County Sheriff's Department implemented a CML Sentinel 911 Call Locating System. This system includes the X-Trakker mapping software component for automatic display of wireless and wireline 911 calls. The Sheriff's Department conducted a GPS Addressing Project in 2004-2006. In 2007, The Vilas County Board approved the Uniform Addressing System Ordinance for countywide addressing. The Land Information/Mapping Department is responsible for administering the ordinance. The address data is maintained and pushed to the 911 call system by the Addressing Coordinator on a weekly basis.

Spillman AVL – Assist the Vilas County Sheriff's Department and Information Technologies to access the Spillman Geobase Mapping software through laptop computers, that are mounted within each squad car, using Automatic Vehicle Location software. Land information/Mapping staff would be involved in the initialization phase as well as maintenance of the data within the software.

II.C. New Initiatives

II.C.1. Proposed Projects (All projects are subject to continued retained fees, grants,

budget allocations and staff workload that may affect the timeline to start or complete projects.)

Digital orthophotography update - The County plans to participate in the 2010 WROC to acquire 12 inch color digital orthophotography. This data layer will update the 12 inch color digital orthophotography obtained in 2005. The partnerships established by participating in this project will aid the County with future production of new digital orthophotography and possibly other land records data layers. This project is being funded by retained fees from the WLIP with a total project cost of $76,350. Payments will be split over the 2010-2011 budget cycles. The Lac du Flambeau Tribe has offered to partner with Vilas County for 50% of the cost of the photos which cover the tribal lands.

Imaging/scanning of older land record documents (Register of Deeds) - The Register of Deeds Office will continue scanning and automation of their land information records funded by retained fees and base budget grants from the WLIP as well as general revenue funds. All hard copy and microfilm records since digital scanning began would be converted to a digital format, furthering the process for data development of public records to be more readily available via the intranet and internet.

County Plat Book - In 2011, the Land Information/Mapping Department will design and develop the Vilas County Plat Book. The County will contract the printing of the book.

Redacting SSN from older land record documents (Register of Deeds) – Whether this project is contracted out, accomplished with existing county personnel, or additional software is purchased that will search and redact SSN this will be an expensive project that will take a significant amount of time for this county. Any base budget grant or retained fees available would be necessary to proceed. At this time Vilas County is a long way away from making these documents available in digital form and accessible through the web service.

Imaging/scanning of older land record documents (County Surveyor) - Also, imaging the County Surveyor's records would also be a huge benefit to not only other County departments, but to the general public as well. A large format scanner was purchased in 2007, and it is estimated that 98% of the estimated 17,000 paper surveys filed with the County Surveyor have been scanned and stored as .pdf files. These files and Survey Index will be available for purchase to the public as digital files contained on cd/dvd media. The Survey Index will be linked to the survey images when using the index in Microsoft Access.

Internet map server - After successfully implementing an intranet GIS map server to network all of the Land Records Departments and their data throughout the courthouse (except for Forestry which is at an offsite location), the benefits of this application have become quite obvious. Vilas County is actively pursuing further

research and development of web mapping software with existing internet service infrastructure available to county residents. Partial funding for this project is expected to be by WLIP fees designated by statute to be used for this type of application.

Hardware/software upgrades - The County plans to upgrade its land records hardware/software as needed and acquire new where a needs assessment determines it is appropriate. For example, the proposed changes by the Department of Revenue (DOR) to standardize property assessment throughout the state. The Tax Listing Office may require additional software to accommodate the changes in assessment data that the DOR may require. At this time, no new land records hardware or software has been budgeted for.

Connect the County GIS users to Mapping Geodatabase – Create a central warehouse for all GIS datasets within the Mapping SDE and Server. For example, the Forestry Department is located offsite, and does not have a direct connection to the Mapping Department SDE. Mapping is the custodian of the planimetric data used by all GIS users in the County. Forestry requests new data sporadically which can create inconsistencies in the County's map publications. A direct connection to the most current planimetric datasets would reduce data storage duplication and provide access to the most current data for all of the County GIS users. Appropriate permissions would be allowed to the various data users to ensure the accuracy of the datasets based on data custodianship. Development of this direct connection to Mr Slate (GIS server) and the Mapping Geodatabase would greatly improve the efficiency of data acquisition for all of the GIS users.

Acquire LIDAR data – Use LIDAR data to assist shoreland zoning and floodplain determination.

AutoCAD to ESRI Conversion – All of the parcel mapping is begun as 1 section AutoCAD drawings comprised of multiple CAD layers. These layers are time consuming to convert to feature classes in a geodatabase. Many issues exist with the annotation layers that are converted monthly. Progress has been made to eventually convert all data within the AutoCAD drawings into feature classes in the Mapping Geodatabase to streamline workflows and reduce redundant data stored in different formats. Hopefully, all data will be converted by the end of 2011.

Census - The County plans to provide updates to the Census Bureau as requested and assist the County Clerk with any future redistricting mapping as needed.

Staffing - As data sets are created, applications expand, and maintenance responsibilities increase, the County will continue to evaluate the staffing needs and adjust accordingly.

Training – Training on new tools within current software, applications using the software, data management and storage are necessary for the Land Information/Mapping staff to remain current with technology.

Emergency government - The Land Information/Mapping Department will continue to look for ways to support the efforts of emergency service agencies in cooperation with the Emergency Management Director. Development of map layers indicating locations of emergency shelters, hazardous materials, and special needs populations could benefit the County. Incorporate the National Grid (MGRS) into emergency response planning and operations. Assist in updating and printing the Vilas County Emergency Response Zone Atlas which uses county address site, road and waterbody data to delineate fire suppression zones. The Emergency Management Coordinator applied for a HMEP/EPCRA (Hazardous Materials Emergency Preparedness/Emergency Planning and Community Right-to-Know Act) Supplemental Planning Grant in 2007 to produce this atlas in conjunction with the WDNR and NCWRPC. This atlas needs to be updated and reprinted on a 5 year cycle. Development of Fire Number Atlas and Directory for each town to be published annually.

II.C.2. Assistance Requested

II.C.a. The County has demonstrated over the years that it has secured the technical assistance needed to carry out our plan. The need for digital elevation data is the most challenging to achieve due to funding. Outside funding and help from the experts, similar to the digital orthophoto consortium, where a blanket RFP could be developed and County's could elect to 'buy in' as there situation warrants would be helpful. The County has actively sought agencies or consultants prior to implementing projects and will continue to do so for new initiatives. Additional technical assistance has been acquired from user group meetings, training courses, and seminars. Current staff includes a GIS Coordinator, GIS Technician, Addressing Coordinator, County Surveyor, and a Mapping/Surveying Specialist. We are further supported by the Tax Listing Department, Register of Deeds, IT Department, and the IT consultant. The County has Internet connectivity and will connect to the WLIP Internet Land Information Clearinghouse and Technical List Server Service as needed.

II.C.b. At present, all remonumentation, the in house parcel mapping project, and maintenance of many of the land records projects are paid for out of the County's general revenue fund along with the retained fees and grants of the WLIP.

It is imperative that the WLIP continues so the retained fees and the grants are available for ongoing and new initiatives in Vilas County. It is important for the DOA to ensure the program continues to be focused on creation and maintenance of land information data sets to support all land information users not just a select few. The County will seek funding as opportunities arise to help fund land records activities and will be applying for grants related to offsetting the cost of the 2010 WROC Project as well as the scanning and redaction of the Register of Deeds documents.

It is also imperative that all of the fees the counties send to the State as part of the WLIP are used for land records systems and data to benefit all counties and local units of government and not diverted to unrelated activities.

The funds currently allocated by the WLIP ($300) for education and training should be increased. The County encourages the DOA to increase the education and training grants provided to counties. Vilas County uses the $300 to attend the annual WLIA Conference. Annual conference costs $350 for two people. There are 4 people in the Land Information/Mapping office. If the LIO and one staff person attend the annual conference each year, then each staff person attends the conference once every three years. Add the cost of workshops, lodging and meals to the conference registration fees, and attending the annual conference approaches $1,000 for two people to attend. If the $300 training and education funding was increased, there would be more attendees to the annual conference from Vilas County.

The County would like the WLIP to provide partnerships or additional funding mechanisms for coordinated efforts for acquiring statewide, high resolution, color orthophoto flights such as the attempts made by the WROC organizers.

II.C.2.c. The County will continue to use the $1 to create, develop, update and maintain land records data that will be accessible on the intranet GIS map server. The County will continue to develop an internet GIS map server to make this information available from the Internet sometime in the 2010. When speed internet access is available to a majority of the Vilas County residents, the GIS webmap service will continue to develop to keep up with technology.

II.C.2.d. The County will evaluate the requirements for requested statewide repository when one is made available. If the requirements are burdensome or unrealistic, the County will work with the land records community to revise the requirements.

II.C.2.e. The County will continue to follow County ordinances and State statutes for procurement of services/products related to this Plan. The County would like WLIP to provide practical standards along with a functional model for basic data sets and sample RFP's to assist the entire project and bidding processes.

II.C.3. Problems encountered

We have successfully dealt with most unanticipated problems as they occurred. The biggest problem that Vilas County faces at this time is the lack of high-speed internet infrastructure. Approximately 75% of Vilas County has "dial-up" connection. The County's Economic Development Committee has been

negotiating with several individuals, but has not contracted with any company to acquire high-speed internet service. Developing a web map service is challenging with this type of technology.
Also, there would be a problem if the Department of Administration adopts policies that would limit the use of WLIP funds for planned activities or concerns expressed in II. C. 2. b) on page 8. At this time, the County is not aware of other problems that would prevent the implementation of this Plan, however the County remains concerned about the State budget situation and potential legislation that may have a negative impact on the County's current situation.

II.D. Custodial Responsibilities

II.D.1. – 4. Following are the Vilas County departments and their land record custodial responsibilities. Text within { } indicates whether we HAVE , would LIKE, or WILL accept custodianship of the data. The authority for custodianship is noted in ( ). An * indicates that the records are necessary for the operation of the office but are not specifically mandated by a governing body.

REGISTER OF DEEDS

Recorded deeds, mortgages, plat maps, certified survey maps, and other related documents. {Have}(§59.43)
Scan above mentioned records into our imaging system as they are received and filed. {Have}(§59.43)
Maintain tract index of real property. {Have}(§59.43)

TAX LISTING

Maintain owner's name and an accurate legal description as shown on the latest records of the Register of Deeds Office. {Have}(§70.09)
Maintain parcel numbers for real and personal property. {Have}(§70.09)
Maintain owner's mailing address. {Have}(§70.09)
Maintain information on school and other special district codes. {Have}(§70.09)
Maintain tax rates and special assessments information. {Have}(§70.09)
Maintain existing hard copy parcel maps. {Have}(§70.09)

LAND RECORDS/MAPPING

Implement the Land Information Plan. {Have}(§59.72)
Store digital orthophotography. {Have}(*)
File gas tax maps. {Have}(*)
Maintain digital parcel maps. {Have}(§70.09 & Internal Policy)
Maintain GIS base map feature classes. {Have}(*)
Store digital soil survey. {Have}(*)
File aerial photos. {Have}(*)
Maintain GIS zoning and related geodatabase. {Have}(§59.69)
Maintain GIS E911 related geodatabase. {Have}(*)
Maintain available site addresses countywide. {Have}(Chapter 28, Vilas County General Code)

COUNTY SURVEYOR

Maintain information on PLSS corners including tie sheets and section summary sheets. {Have}(§59.74) (A-E 7.08)
Maintain information on the high accuracy network (HARN) densification in the county. {Have}(§59.74)
File private survey maps. {Have}(§59.74)
File field notes and other survey source documents. {Have}(§59.74)

PLANNING AND ZONING

Maintain zoning maps for unincorporated areas. {Have}(§59.69)
Maintain private sanitary system site plans. {Have}(§59.69)
Maintain permit database. {Have}(*)
File wetlands and FEMA maps. {Have}(*)

HIGHWAY DEPARTMENT

File right-of-way plats and construction plans. {Have}(*)

SHERIFF'S DEPARTMENT

Maintain Master Street Address Guide (MSAG). {Have}(§146.70 & Internal Policy)
Maintain E911 related data. {Have}(*)

FORESTRY DEPARTMENT

Maintain tabular and digital forest stand data. {Have}(*)
Maintain information on the location of some endangered resources & resources of special concern on the county forest. {Have}(*)
Maintain records & maps of wildlife conservation projects. {Have}(*)
Maintain recreation project locations & data including trails, bridges, boat landings, and piers. {Have}(*)
Maintain some historical aerial photography. {Have}(*)
Maintain the data & location of survey work on the county owned lands. {Have}(*)
Maintain records of tax deeds for parcels taken over by Vilas County. {Have}(*)
Maintain records of all County owned land. {Have}(*)

COUNTY TREASURER

Maintain tax information for all parcels. {Have}(§59.25)

INFORMATION TECHNOLOGY DEPARTMENT

Maintain all digital tax data including tax roll, assessor's workbooks, town and Treasurer's receipts, digital descriptions, and ownership information of all parcels. {Have}(*)

II.E. Framework Data, System Implementation and Statewide Standards

*(**Bolded italic items*** are required items to be addressed per the instructions. Land records fees are planned to develop, update and/or maintain these Foundation Elements.)

II.E.1. Geographic Positioning Reference Frameworks - Vilas County's data uses the Wisconsin Vilas County Coordinate System which is based on the North American Datum (NAD) 83(91) and therefore is able to be geographically referenced for use by others.

a. Geodetic control networks. Initial first order (1ppm) and secondary order (2ppm) control were completed in 1994 from stations within the Wisconsin High Accuracy Reference Network (HARN). The County uses the Wisconsin Dept. of Transportation Guidelines on Standards and Specifications for GPS Surveys in Support of Transportation Improvement Projects (Draft October 23, 1996) to develop 10 ppm control stations (tertiary) and then coordinate data is acquired on PLSS (Public Land Survey System) corners to produce the Section base maps needed for accurate parcel mapping. The County assumes custodial responsibility for the 10 ppm control stations except in the State of Wisconsin lands where the DNR has agreed to maintain the stations. Primary, secondary and tertiary coordinate values are available in the Vilas County Coordinate Grid, State Plane, and Latitude & Longitude.

b. Public Land Survey System. Remonumentation has been an ongoing project for Vilas County and to date is 84% complete. The County has an active corner remonumentation program that complies with the requirements Chapter AE 7.08 of the of Wisconsin Administrative Code, and the County will continue the program countywide. The County has established coordinates on the PLSS corners using a combination of conventional survey techniques and GPS technology meeting or exceeding the FGCC Third Order Class I accuracy standard. Because Vilas County's northern border is the State Line, the vast amount of surface water, and dense tree canopy in Vilas County, meander corners and closing corners are quite common. In an attempt to keep costs down, direct GPS control was only obtained on as many corners that were necessary to allow for the rest to be computed from survey information.

Coordinates are maintained in the Wisconsin Vilas County Coordinate System, based on the North American Datum (NAD) 83(91). Priority areas are determined by where GPS control is needed on the PLSS corners required to complete the parcel mapping. Other GPS control areas (i.e., industrial forests, etc.) maybe obtained as needed and budget allows. The County Surveyor and Land Records/Mapping Department maintain the custodial responsibility for the PLSS corners and GIS datasets.

II.E.2. Orthoimagery and Georeferenced Image Base Data

a. Photogrammetric base maps. The County plans on updating its planimetric

features using digital orthophotography as necessary as part of parcel mapping update activities. The mapping will adhere to National Map Accuracy Standards for 1"=200' scale mapping. The County intends to maintain the custodial responsibility.

b. Digital orthophoto (DOP). The County plans to participate in the 2010 Wisconsin Regional Mapping Initiative to acquire 12 inch color digital orthophotography. The County plans to update the photos every 5 years depending on development and future funding allocations. The photography will be acquired to support National Map Accuracy Standards for 1"=200' scale mapping. The County intends to maintain the custodial responsibility.

c. Digital raster graphics. The County acquired scanned quadrangle maps from the WDNR. These will be updated as soon as the USGS makes them available.

d. Satellite Imagery. The County will be evaluating satellite imagery technology as a possible tool for base map updates, but is unable to make any commitment to this technology at this time.

e. Oblique aerial imagery. This type of imagery would be beneficial for public safety in dense population areas, but the county is unable to make any commitment to this technology at this time due to budget constraints. Other issues with this technology include: cannot guarantee 1:200 foot accuracy which is the Vilas County parcel mapping standard; photos cannot be mosaicked and viewed in a seamless image; images can only be viewed in proprietary software.

f. Historical Aerial Imagery. The Land Information/Mapping Department has intermittent coverage of the county for May 1938 in hardcopy format; countywide coverage in August 1979 in hardcopy format; countywide coverage in May 1996, black & white, 1 meter resolution, digital and hardcopy formats; and countywide coverage in May 2005, color, 1 foot resolution, digital and hardcopy formats. The 2010 images will be delivered in color, 1 foot resolution, digital format.

II.E.3. Elevation Data Products and Topographic Base Data

a. Digital elevation models (DEM). A DEM was produced with the 2005 orthophoto project and there are no plans to acquire any updated digital elevation models at this time. If the need arises and funding is available, the County would be interested in obtaining this data layer.

b. Digital terrain models (DTM). There are no plans to acquire digital terrain models at this time. If the need arises and funding is available, the County would be interested in obtaining this data layer.

c. Triangulated irregular networks (TIN). There are no plans to acquire triangulated irregular networks at this time. If the need arises and funding is available, the County would be interested in obtaining this data layer.

d. Contours. There are no plans to acquire contour data at this time. If the need arises and funding is available, the County would be interested in obtaining this data layer.

e. LIDAR data. There are no plans to acquire Light Detection and Ranging (LIDAR) data at this time. If the need arises and funding is available, the County would be interested in obtaining this data layer.

f. IFSAR data. There are no plans to acquire Interferometric Synthetic Aperture Radar (IFSAR) data at this time. If the need arises and funding is available, the County would be interested in obtaining this data layer.

II.E.4. Parcel Mapping

a. & b. Preparation of parcel maps. Parcel mapping has been the primary focus for the Land Information/Mapping Department. The County's digital parcel dataset is maintained by the Land Information/Mapping Department utilizing AutoCAD software and a COGO routine. The parcel dataset was completed in 2009. All parcel maps are referenced to the lines of the PLSS with GPS control and are suitable for assisting with land title boundary or survey line determination. The Vilas County parcel maps are not intended to be a substitute for a certified land survey or to guarantee title to property. Included in the metadata for this dataset is information that directs users to the original recorded source document or filed survey. The WLIB Digital Parcel Mapping Standard was followed to develop this dataset.

c. Coordinate system used. The parcel maps will be geodetically referenced to the Wisconsin Vilas County Coordinate System, which is based on the North American Datum (NAD) 83(91).

d. Parcel ID. The Tax Listing Office creates a parcel ID numbering system, which was approved by the Wisconsin Department of Revenue, to conform to state classifications for the statement of assessment.

II.E.5. Parcel Administration and Assessment Information

a. Design. Vilas County's data base supports integration of digital parcel maps with property and ownership information by linking data through key fields. The Land Records/Mapping Department uses ESRI and AutoDesk software to maintain the digital parcel maps that include the key fields as attributes. The IT and Tax Listing Departments use an IBM AS400 to maintain the tabular databases

relating to various land records that include the key fields. Both of these databases are currently linked together in our Intranet GIS Map Server.

b. Activities. (The County plans to maintain the items listed below and will adhere to applicable standards, as necessary).

Parcel ID. The PIN is an attribute in our GIS parcel database that corresponds to our tabular land records database on our AS400. (See 3. d. above, page 17.)

Tax data. The tax database is housed in the AS400 and maintained by the Tax Listing. It is designed so information can be accessed by PIN, owner name, legal description, or site address and can be linked to the GIS parcel map database by parcel ID.

Site Address. Individual site address information can be accessed through the tax database or GIS database and is maintained in both locations. This information is edited and pushed to the PSAP.

Owner Name & Address. This data is maintained in the AS400 tax database.

Description/current document pertaining to parcel. The current document number of the deed for a parcel is maintained in our AS400 tax database and the full description can be obtained from the deed. A brief legal description is maintained in that tax database because the length of many of the descriptions eliminates the possibility of having the full legal description for every property in the tax database.

Document imaging. The Register of Deeds Office began to image documents relating to property transactions on May 24, 2001. As time and budget allows, we plan on imaging documents from prior years. Imaging may also be expanded to include and maintain other land records data such as building permits, tax records, survey maps, and certified corner certificates.

Real estate transactions. The Register of Deeds Office records these transactions and maintains a tract index. Searches can be made by grantor, grantee, legal description, or document number through the automated tract index system. The Tax Listing Department maintains the tax database to reflect these real estate transactions.

Easements and restrictions, including conservation easements. The Register of Deeds Office records these transactions and maintains them in an automated tract index so searches can be made by grantor, grantee, legal description, or document number.

Tax exempt lands. These are maintained as a code in the tax database and are linked to the GIS parcel coverage.

Zip code. Both the owners' mailing address zip code and the property's physical address zip code are maintained in the tax database.

Assessment class. These are maintained as a code in the tax database according to Department of Revenue assessment classes and are linked to the GIS parcel coverage.

Public Lands. Presently our system only tracks these lands under the tax exempt status.

Liens. The Register of Deeds Office records these transactions and maintains an automated tract index so searches can be made by grantor, grantee, legal description, or document number.

Evidence of Title. The Register of Deeds Office maintains the current and historic documents affecting title and a tract index so searches can be made by grantor, grantee, legal description, document number, and/or volume and page.

II.E.6. Street Address and Street Network System

a. Transportation network (streets, roads, highways, railroads). The County plans to maintain its existing planimetric basemap that was digitized from 1996 orthophotography. This basemap includes centerlines of all named public and private roads along with other visible trail systems and abandoned railroads.

b. Rights of way. The approximate rights-of-way of public roads are designated when parcel maps are drawn. This dataset is based on information taken from surveys, deeds, and DOT gas tax maps.

a. Centerlines. The County plans to maintain its existing planimetric base map, which includes centerlines of all named public and private roads along with other visible trail systems and abandoned railroads. The County complies with the Vilas County Parcel Mapping Standards as the design standard for mapping centerlines.

d. Address ranges. The County maintains address ranges based on existing address points to support emergency response applications, wireless 911, and routing applications.

e. Site address data base. A grid system for addresses was designed for Vilas County many years ago. In 2007, The Vilas County Board approved the Uniform Addressing System Ordinance for countywide addressing. The Land Information/Mapping Department is responsible for administering the ordinance. The address data is maintained and pushed to the 911 call system by the Addressing Coordinator on a weekly basis. Monthly, the Addressing Coordinator reports address changes to local municipalities, Tax Listing Department, Post Office, Sheriff's Department, utilities, DOT, and others in reconciling conflicting address points.

f. Address point, structure and/or driveway. The County plans to continue collecting driveway points corresponding to addresses and structure points that are accessible and not supplied by a municipality.

g. Road names. The County maintains a GIS road centerline dataset with the current road names as an included attribute. Road names are updated in accordance with the Uniform Addressing Ordinance. Every effort is made by the County to cooperate and coordinate with the local municipalities as well as the property owners to determine appropriate road names throughout the county. Monthly, the Addressing Coordinator reports road changes to local municipalities, Tax Listing Department, Post Office, Sheriff's Department, utilities, DOT, and others in reconciling conflicting road names and locations of roads. The County attempts to make sure all entities comply with Chapter 28 of the Vilas County General Code as well as the US Postal Standards for road naming.

h. Functional class. The County plans on relying on the DOT local road inventory and has access to their digital data.

i. Place/Landmarks. The County's Emergency Management Director maintains landmarks for emergency applications. These are updated as necessary.

j. Integration with the County's/City Master Street Address Guide (MSAG). The Addressing Coordinator in the Land Information/Mapping Department has the responsibility to create, update, and maintain the MSAG. With the 2004-2006 GPS Addressing Project conducted by the Sheriff's Department and the adoption of the 2007 Uniform Addressing Ordinance, it is anticipated that there will be a period of data updates as inconsistencies are found during the 911 call taking process to the MSAG. The County adheres to the 911 provider for data standards.

k. Ability to support emergency planning, response and mapping. The Land Information/Mapping Department and Emergency Government Department collaborate by sharing data sets necessary for emergency applications. Map datasets indicating locations of emergency

shelters, hazardous materials, and special needs populations have been discussed, but no final applications have been developed and implemented. The Land Information/Mapping Department and Emergency Government Department continue to work to expand on these applications and others as available time and funding allows.

l. Ability to support Wireless 911. In 2005, the Vilas County Sheriff's Department implemented a CML Sentinel 911 Call Locating System. This system includes the XTrakker mapping software component for automatic display of wireless and wireline 911 calls. Where available, municipalities' addressing data was incorporated into the system with the rest of the County's data coming from a recently completed GPS Addressing Project conducted by the Sheriff's Department. This system is based on the County's existing GIS that included the road centerlines and associated addresses with all other GIS datasets also able to be used including new digital orthophotography.

II.E.7. Hydrography, Hydrology and Wetlands Mapping

a. Hydrography. The County maintains its a GIS dataset of hydrography based on orthophotography with the DNR Master Waterbody Codes included as an attribute.

b. Watersheds. The County has acquired this feature class from the DNR through a data sharing agreement to exchange their Land Cover, Landnet, and Watershed data for the County's 1996 digital orthophotography.

c. Wetland mapping activities. The County currently is using the original Department of Natural Resources (DNR) digital wetland data. The DNR updated the wetland inventory of Vilas County on hardcopy maps. The DNR has not converted the maps to digital format yet. If the DNR converts the maps to digital format, the County would consider incorporating them into our GIS if the County Board adopts the maps.

d. Hydrogeology. The County would acquire these GIS layers from the DNR or appropriate custodian of the data as necessary for a particular application.

II.E.7. Soils Mapping, Land Cover and other Natural Resource Data

a. Soils mapping activities. The County completed the soil survey and digital soil mapping in cooperation with, and consistent with, the Natural Resource Conservation Service (NRCS) standards and specifications in 1998. Future map updates will be coordinated with NRCS.

b. Land cover. The County has acquired this GIS layer from the DNR through a data sharing agreement. This has not been updated since the original data exchange sometime in the late 1990's.

c. Forests. The County created an approximate public lands layer that includes state, federal, county, and tribal lands as part of a specific countywide application. This GIS dataset must be updated by searching the tax data by code each time it is needed for a County application.

d. & e. Geology & Hydrogeology. The County would acquire these GIS layers from the DNR or appropriate custodian of the data as necessary for a particular application.

f. Non-metallic mining. The County maintains this GIS layer using data reported by the Zoning Department. This data is updated infrequently.

g. & h. Endangered resources, and Impacts on the environment. The County would acquire these GIS layers from the DNR or appropriate custodian of the data as we would deem them necessary for a particular application.

(1) **Aquatic Invasive Species (AIS):** Mapping of invasive plant communities within water bodies is a critical component of management programs. Not only do the populations need to be mapped when initially detected, but annual re-mapping is required to evaluate the effectiveness of management efforts. Most Vilas County AIS mapping needs to date have been satisfied by outside services. However, the Land Information/Mapping Department assisted this program during 2009 by producing lake maps with infestation information from field data collected by a qualified volunteer who did not have the ability to produce maps. The Vilas County Invasive Species Management Program will be relying more on the Land Information/Mapping Department to produce these maps.

(2) **Terrestrial Invasive Species (TIS):** Identification and mapping of invasive plant communities began occurring on public and private land across Vilas County within the past two years. Unlike in the aquatic environment, there are few (if any) professional services to call upon for assistance with mapping or managing these infestations. The Land Information/Mapping Department anticipates producing many maps for this program in the future in conjunction with the Land and Water Conservation Department as well as partnering with a proposed multi-agency co-op. The important advantage of the Land Information/Mapping Department mapping services is the ability to analyze field data with parcel information to produce maps depicting parcel lines and parcel numbers (for reference purposes) with the field

data. This frequently proves valuable in identifying property ownership of infestation areas.

II.E.9. Land Use Mapping

a. Mapping of existing land use. Vilas County completed a Land Use Project in 2009 that compiled an existing land use GIS dataset for the entire county.

b. Mapping of planned land use. Six municipalities have completed a Preferred Land Use Plan as part of the above mentioned county project. Two municipalities have completed their own Preferred Land Use Projects with the North Central Wisconsin Regional Planning Commission and one municipality with a private consultant. The remainder of the municipalities do not have any Preferred Land Use Plans available other than the current zoning maintained by the county. The County will continue to provide the digital planimetric data base and copies of aerial photography to the towns and/or their consultant for development of land use plans in exchange for a copy of their final plan.

II.E.6. Zoning Mapping

a. Zoning Districts. The County created a countywide zoning coverage using our planimetric data. More accurate maps (down to the parcel level) have been developed using completed parcel mapping and better control for the PLSS. All municipalities in the County have zoning districts based on parcel and PLSS data. Zoning districts are mapped in accordance with the Vilas County Zoning Ordinances.

b. Shorelands. A shoreland zoning ordinance, as discussed in our previous plan, was completed and adopted on May 7, 1999. This ordinance is based on a GIS zoning coverage that is a shoreland buffer (1000' from a lake's waters edge and 300' from a stream's waters edge). For specific waterbody zoning details, please contact the Vilas County Zoning Department.

c. Floodplain and floodway. The County presently uses the hardcopy Flood Hazard Boundary Maps (FHBM) for review, although the County is not participating in the Floodplain Program at this time. Vilas County does not have a floodplain zoning ordinance. The current digital FHBM data does not accurately delineate floodplains when used with the Vilas County planimetric data because of the difference in technology used in the 1980's compared to today's technology accuracy standards. The County is interested in acquiring updated Digital Flood Data when the data becomes available.

d. Environmental corridors. No environmental corridors are planned at this time.

e. f. g. Burial sites, Archeological sites, Historic/cultural sites. No plans at this time. These items need further evaluation due to security or preservation issues.

II.E.11. Election and Administrative Boundary System

a. & b. Election & Legislative districts. The County created voting ward, aldermanic, county board supervisory, and state legislative districts with the WISE-LR program based on the 2000 Census data. These districts were also transferred onto the County's accurate GIS basemap. Ward maps are produced and used to aid in the County election process. These maps will be updated after the 2010 Census process is completed.

c. Utility districts. The County's tax database includes a code designating which parcels are within a sanitary district. Graphic boundaries of these districts are created as needed.

d. School districts. The County's tax database includes a code designating which parcels are within which school districts. A GIS dataset showing approximate school district boundaries has also been produced and is based on the County's parcel mapping.

e. Tax incremented financing districts (TIF). The County's tax database includes a code designating which parcels are within a TIF.

f. Agency administrative districts and Zip Codes. The tax database and the GIS parcel map could be used to determine Zip Code boundaries.

g. Census geographies. These will be added and maintained as needed.

h. Civil division boundaries. The County created a feature class of the Civil boundaries based on existing PLSS corners with GPS control and other source materials.

i. Public Administered Lands. The tax database and the GIS parcel map are joined and sorted by codes to determine public administered lands and district boundaries.

j. Native American lands. The tax database and the GIS parcel maps are used to determine Native American land ownership.

k. County boundaries. The County boundary is based on existing PLSS

corners with GPS control and other source materials. Vilas County collaborates with neighboring counties along shared borders.

l. State outline. The County incorporated an existing coverage from other sources into our GIS system and will update as needs arise.

j. Lake Districts. The County's tax database includes a code designating which parcels are within a lake district.

II.E.12. Critical Infrastructure and Facilities Management

a. Emergency Service Areas. The County created emergency service zone maps as part of the Vilas County Sheriff's Department CML Sentinel 911 Call Locating System. This data is maintained in cooperation with our Land Information/Mapping, Sheriff, and Emergency Government Departments.

b. 911 call center service areas & center locations. Call center service areas are the same as the Emergency Service Areas. There is only one Public Safety Answering Point (PSAP) in the county and it is located in the Vilas County Sheriff's Department.

c. & d. Fire/Police Stations and Districts. Fire/Police Stations are within the addressing database and coded appropriately for symbolization on maps. Fire/Police Districts are the same as the Emergency Services Areas. This data is maintained in cooperation with our Land Records/Mapping, Sheriff, and Emergency Government Departments.

e. Hospitals and healthcare facilities. Hospitals and healthcare facilities are within the addressing database and coded appropriately for symbolization on maps. This data is maintained in cooperation with our Land Information/Mapping, Sheriff, and Emergency Government Departments.

f. Government facilities. The GIS parcel map, address and tax database are used to determine Government facilities or publicly owned properties.

g. Utilities. Although some utilities mapping was acquired for the Countywide Land Use Project, these datasets have not been updated or maintained by the county. Post 9/11, utility companies are responsible for creating/maintaining utility data sets and protecting this information. However, the County will make our base map data available to utilities, sanitary districts, etc. at our normal purchase price or through a data exchange Vilas County may waive or reduce the cost for available GIS datasets.

h. Parks & Recreational Trails. The Forestry Department maintains a snowmobile and other major named trails layer that is geographically referenced onto the Vilas County GIS basemap. A bicycle trail system was developed by the Land Records/Mapping Department in cooperation with the Vilas Area Mountain Bike and Ski Association (VAMBASA). Renewed interest for developing bike trails has come to the county's attention this winter. The County is interested in obtaining information for parks from the local municipalities, County Forestry Department, USDA, and WDNR for these locations.

i. Transit systems. This item is not part of any Vilas County GIS dataset at this time.

j. Bridges, culverts, traffic road signs. The County currently has a bridge GIS dataset that was captured with the initial planimetric features from our digital orthophotography. The basic GIS frame work is in place to create an inventory of the culverts and traffic road signs in the county, but is still only in the discussion stage between the Land Information/Mapping and Highway Departments.

k. Airports and Airfields. Airport runways are included and are maintained within the planimetric GIS dataset.

l. Harbors. This item is not part of any Vilas County GIS dataset at this time.

m. Boat landings. A point GIS dataset of improved and unimproved boat landings was produced during the Countywide Land Use Project. This is updated using the WDNR website and local resources as landings are added or taken out of service.

n. Hazardous materials sites. In compliance with EPCRA requirements, Vilas County Emergency Management maintains a file of all Tier II reporting sites in the County. A feature dataset from this list is in the planning phase.

o. Landfills. The County is interested in obtaining point information of landfills from the WDNR for these locations.

II.E.13. Data Base Design

a. Design Evaluation. Communication between Land Records Departments is of utmost concern while determining the design evaluation. Interdepartmental benefits are of primary concern to maximize data sharing and consistency and to reduce and/or eliminate duplicate data sets.

b. Project Approach. The approach varies with each type of project. Typically a conceptual model is developed, a prototype built, and revisions are made as a result of various testing to a pilot project or area. Implementation, production and a maintenance procedure usually follows.

c. Timeline. Determined from the results of a needs assessment, design evaluation, complexity of projects, and available funding.

d. Metadata policies. The County plans to continue maintaining the metadata already established for our GIS datasets and to create metadata for any new GIS datasets.

e. Security/Privacy policies. See Section II. F. h. & i. on page 29.

f. Implementation and Maintenance Strategy. The County carefully evaluates projects before implementation to ensure the efficient production of a stable dataset that accomplishes what was needed. The maintenance varies by projects or feature classes, however the custodian of the data set is directly involved with the data maintenance and the quality control to check for data integrity and currency.

g. Data quality management. The custodian of the dataset is responsible for managing the quality of their data. If problems are found they are dealt with as time and budgets allow.

h. Needs Assessment. As new GIS datasets are requested, a needs assessment process to aid in the design and implementation is performed to ensure integration and to prevent duplication of efforts. As time allows, these new datasets can be created and incorporated into existing and new projects.

i. Data structure and format (e.g. topology). Topology rules within the ESRI environment are followed for the County GIS datasets. The software used to create and maintain the datasets dictates the format of the data.

j. GIS Data Model. The GIS data model in Vilas County is driven by the parcel map GIS dataset. Most available GIS datasets directly interact with the parcel map dataset ensuring connectivity between different sources of County data. Although the theory of a GIS data model exists, a hard copy layout has yet to be created.

k. Data Dictionary. A complete data dictionary is planned to be compiled from the many existing attribution formats for the County's GIS datasets. As GIS datasets are developed and maintained, the County develops data attribution rules that keep the data consistent and in a format able to be put into a data dictionary.

l. Coding schema. The County uses existing standardized coding schemes in all GIS datasets.

m. Transaction management. A date field is carried in most data bases to track changes and updated as changes are made to data layers or elements.

n. Organizational information flows. There is an organizational information flow through the Land Records Departments as a document is recorded in the Register of Deeds Office, filed with Tax Listing Office, and forwarded to Land Information/Mapping for parcel mapping. Within the Land Information/Mapping Department, there is an internal work flow from AutoCAD drawing to storage in the ArcGIS geodatabase. Data is additionally pushed into the 911 Dispatch system by the Addressing Coordinator.

o. Data Conversion. GIS datasets are geographically referenced which allows the data to be converted to other coordinate bases. Vilas County also converts most other data types and formats into our GIS. Also, tabular data can be converted to and from a variety of data formats. The County uses ARCGIS and AutoCAD as our GIS software and provides data to others in ESRI and Autodesk standard export formats.

p. Ability to integrate with other databases and information systems. The County identifies key fields or data elements needed to support sharing of data sets and incorporates them in our GIS datasets whenever practical to promote integration.

II.F. Public Access

a. Use of technology to facilitate efficient access. The County currently has public access computer terminals available to the public for searching tabular property ownership data from the AS 400 tax database in the Register of Deeds Office and Tax Listing Department. In early 2004 we implemented an intranet GIS map server to network all of the Land Records Departments and their data throughout the courthouse. The County is currently developing the web mapping service to make the GIS data easily accessible to the public via the County Website. We will continue to monitor developments of the WLIP Internet Land Information Clearinghouse.

b. Use of 3rd party technology for access (e.g., GIO Repository, Google, offsite hosting). The County is currently developing an interactive web map service that will have links to 3rd party data.

c. Data sharing polices (copyright, licensing, fees etc). The County

remains willing to share GIS data between both public and private agencies. The County has a Data Disclaimer and Usage Agreement that must be signed prior to delivery of any digital data. The County recently adopted a revised fee schedule for our GIS datasets and hard copy maps. Contact the Land Records/Mapping Department for information pertaining to acquisition of available GIS data. Contact the IT Department for the County tax database.

d. Open access to data in existing format. Vilas County adheres to the Wisconsin Open Records Law for access to land records data.

e. Subscription-based or public-facing web services. The County does not have any plans to offer this type of service at this time.

f. Optional production of customized data on cost-recovery or other basis. Vilas County offers both tabular and graphic data for purchase in industry accepted interchange formats. Digital data requests are handled through the Land Records/Mapping Department or IT Department in cooperation with the custodian of the data. Customized data requests are subject to an additional labor charge to provide the public data in the requested format or final output.

g. Internet accessibility (ADA compliance, security). The County strives to be ADA compliant to the extent possible.

h. System security. The County's WebGIS operating system is based on a Windows 2003 sp2 Active Directory Server that sits outside the county network firewall to protect the integrity of the source land records data. The ArcGIS mapping data resides on a Windows 2003 sp2 Active Directory Server on the Vilas County network along with the tabular land records data which resides on an IBM AS/400. The Information Technology Department maintains all data back-ups and/or images for the above mentioned servers. Security plans, which are an ongoing process, are also in place to minimize downtime in case of an emergency where loss of data has been established.

i. Privacy policies. Vilas County adheres to the Wisconsin Open Records Law and complies with State Statutes. The County follows a privacy policy of it's own but will be monitoring the industry and the public concerns related to privacy and distribution of land records data.

j. Use of $1 fee designated for land information and housing data. The County will continue to use the $1 to create, develop, update and maintain land records data that will be accessible on the intranet GIS map server. The County will continue to develop an internet GIS map server to make this information available from the Internet sometime in the 2010.

II.G. Integration and Cooperation

a. Formal data sharing agreements. There have been many informal institutional arrangements in the past with county, town, state, federal, and private entities. The County will continue these arrangements and pursue others as opportunities arise. The County encourages others to use the digital data by setting a nominal cost or no cost. Cost-free exchanges of information are encouraged.

b. Formal or informal data maintenance agreements. The County has internal data maintenance arrangements to ensure data integration and accuracy. This also reduces unnecessary data duplication.

c. Cooperative arrangements. The County has participated in a number of cooperative projects and plans on pursuing others as opportunities arise. Vilas County anticipates cooperative agreements with digital ortho production, County Forest stand mapping, addressing, census, trail mapping, and land use.

d. Consortia. The County will evaluate opportunities as they arise. The County has participated in the 2005 Orthophoto Consortium and has committed to participate in the 2010 WROC Project.

e. Collaborative arrangements. The County actively participates in collaborative arrangements for data creation particularly with other County departments. Vilas County plans to continue to participation in the North Central Wisconsin GIS Users Group, WLIA and their technical committees, WLIP Technical Assistance List Server, and others as opportunities arise.

f. Statutory relationships among counties and state agencies. The County will comply with statutory requirements relating to land records as applicable.

II.G.1. ***Integrative/Cooperative relationships.*** Vilas County has actively encouraged and supported integration and cooperation activities related to land records modernization as cited elsewhere in this plan and as indicated in past WLIP grant applications. By utilizing standard types of GIS software and standard data formats, the County feels it is in an excellent position to both obtain and supply all types of land records information between itself and public agencies, public entities, and private entities. The County plans to continue these relationships as we deem appropriate.

II.G.2. ***Potential partners/projects.*** The County is open to negotiating with potential partners for development, update, or maintenance of any land records data set. Please contact the Vilas County Land Records/Mapping Department. The County currently possesses, is in the process acquiring, or is interested in developing relationships for digital orthophoto production, forest stand digital mapping, PLSS coordinates, parcel mapping, addressing, census, historic aerial photography scanning, sign inventory, land use mapping, etc. Potential partners would be other county departments, other counties, local surveyors, NRCS, DOA, DOT, DOR, NCWRPC, State Cartographer, DNR, Towns, and the City.

II.G.3. ***Data shared/used.*** The digital County base map is being shared and used for the common registration of data sets. The existing GPS Network with coordinates for the PLSS corners, parcel mapping, digital orthophotography, and any other GIS dataset would be available for partners in data acquisition. The County is very open to sharing of data.

II.G.4. ***Coordination of funding.*** The County has made an effort to keep the best interest of all Land Records Departments in mind while allocating funding from the WLIP. Without this funding, Vilas County's land records modernization efforts would be far less advanced than they currently are. Much of the funding to date has been put into completing the GPS Network which establishes coordinate values on the PLSS corners and to complete the digital parcel basemap. The Land Records Departments understand the importance of completing the digital parcel basemap to tie all the available county datasets together via the key fields located in the datasets. Once the digital parcel basemap was completed, the priority has been to develop and deploy the WebMap Service. Numerous other activities have been identified in the Land Records Departments that the WLIP funding will be used for and have been outlined in Section II. C. on page 8.

II.G.5. ***Participation of municipalities and other agencies.*** Vilas County Land Information/Mapping Department has a positive working relationship with the Towns and the City of Eagle River. The County plans to continue providing hard copy address maps, parcel maps, aerial photography, zoning, and other types of maps to them for their use. The digital data is also available and in many instances the Towns and City have obtained various digital data sets to assist in their work at no cost. Web GIS map server would significantly improve access to many of these public records and digital datasets. The County will continue to make data available to both public and private agencies to aid in their work.

II.H. Communication, Education, Training, and Facilitated Technical Assistance

a. Documentation of County data. County staff attended the Metadata workshop sponsored by the WLIB and the State Cartographers Office. The County plans to continue updating and maintaining applicable metadata as time and resources allow.

b. Resources available. The Land Records Departments have attended their own related seminars along with the WLIA conference, district meetings, users' group meetings, and any other training sessions that are appropriate. The County will continue to do so as time and budgets allow. The Land Records Departments will continue to work with our Information Technology Department and consultant for technical assistance where more assistance is needed.

c. Identification of customers needs. The County Land Record Committee meets every other month to discuss current activities dealing with land records and to plan for future projects. This committee administers and guides the Land Records Program by discussing and prioritizing the needs of the County and implementing programs to address these needs as budgets and resources allow.

d. Coordination of education/training with agencies, associations and educational institutions. As opportunities arise, we will participate as appropriate and where budget allows. Vilas County staff have presented at some past WLIA events and will continue to share our experiences with others.

e. Use of technology to facilitate education and training. The County has access to Internet based training courses and will use other systems as appropriate.

f. Use of Clearinghouse and Technical Assistance List Server. The County has desktop access to the Internet that allows for convenient use of the clearinghouse and technical assistance list server. The County plans to participate as situations and needs warrant and will continue to monitor the development of the clearinghouse and standards adopted.

g. Use of Land Information Office education and training funds. The County uses the education and training funds provided by the WLIP to enable land records staff to participate in land records seminars, workshops or training.

II.I. Administrative Standards Not Associated With Foundational Elements

Concerns and/or changes relative to agreement between the County and DOA/ WLIP noted in italics.

1. The County agrees to observe and follow statutes relating to the Wisconsin Land Information Program (WLIP) and other relevant statutes.
2. The County agrees to permit the Wisconsin Department of Adminstration (DOA) access to *WLIP funded* books, records and projects for inspection and audit *upon reasonable notice* by the WLIP. *Other land information records etc. will be available in compliance with the Wisconsin Open Records Law.*
3. The County agrees to complete the annual WLIP Survey.

4. The County agrees to update the plan every 5 years and in the interim if the plan should change.
5. The WLIP agrees to facilitate technical assistance to the County including an online Technical Assistance Service.
6. The WLIP agrees to maintain and distribute an inventory of land information and land information systems for the state. This will be provided through an electronic Clearinghouse.
7. Development and implementation of an acceptable Plan confers certain benefits on local government within a county, including continued eligibility for Program funding. A voluntary peer review process will be used to assess Plan acceptability by the land information community.
8. The WLIP agrees to review funding requests and to provide guidance to local government with respect to the development of such requests.
9. The WLIP agrees to make available electronically an Annual Report regarding the status of the Wisconsin Land Information Program and the activities of the Board.

RESOLUTION 2010 - 97

Re: VILAS COUNTY LAND INFORMATION PLAN 2010-2015

WHEREAS, Vilas County Board of Supervisors Resolution 90-39 created the Vilas County Land Information Office per Wisconsin Statute 59.88(3), now known as 59.72(3); and

WHEREAS, under Wisconsin Statute 59.88(3)(b), now known as 59.72(3)(b), Vilas County prepared a County-wide Plan for land records modernization; and

WHEREAS, the Wisconsin Department of Administration issued statewide instructions to update Land Information Plans in January 2010; and

WHEREAS, under Wisconsin Statute 59.72(5), the Vilas County Register of Deeds Office collects fees that must be used to develop, implement and maintain the County Plan; and

WHEREAS, the Register of Deeds will be able to continue to collect fees and the County will be eligible for continued participation in the Wisconsin Land Information Program by updating our Plan; and

WHEREAS, the Vilas County Land Records Committee recommends acceptance and approval of the attached Vilas County Land Information Plan 2010-2015 by the Vilas County Board of Supervisors.

NOW, THEREFORE, BE IT RESOLVED by the Vilas County Board of Supervisors in session this 17th day of August, 2010 that we hereby accept and approve the attached Vilas County Land Information Plan 2010-2015.

Fiscal Impact Statement:
☐ Included within Resolution
☐ See Attached
☒ Not applicable

APPROVED AS TO FORM

Corporation Counsel

SUBMITTED BY:
Land Records

Steven Favorite, Chair

Mary Platner

Fred Radtke

Jack Harrison

Ed Bluthardt

I, David R. Alleman, Clerk of Vilas County, Wisconsin, do hereby certify that the attached resolution is a true and correct copy of a resolution which was approved by the Vilas County Board of Supervisors on the 17th day of August, 2010.

David R. Alleman
Vilas County Clerk