

# Ozaukee County



## 2011-2016 Land Records Modernization Plan

**OZAUKEE COUNTY  
LAND RECORDS MODERNIZATION PLAN INDEX**

**2011 - 2016**

<b>I. EXECUTIVE SUMMARY</b>	<b>3</b>
<b>A. Identification and contact information</b>	<b>3</b>
<b>B. Participants in planning process</b>	<b>3</b>
<b>C. Summary of Plan</b>	<b>3</b>
<b>II. LAND INFORMATION PLAN</b>	<b>4</b>
<b>A. Goals and Objectives</b>	<b>4</b>
<b>B. Progress Report on Ongoing Activities</b>	<b>6</b>
<b>C. New Initiatives</b>	<b>8</b>
1. Proposed projects	<b>8</b>
2. Assistance requested	<b>11</b>
3. Problems encountered	<b>12</b>
<b>D. Custodial Responsibilities</b>	<b>12</b>
<b>E. Foundational Elements and Statewide Standards</b>	<b>14</b>
1. Communication, Education, Training, and Facilitated Technical Assistance	<b>14</b>
2. Geographic Reference Frameworks	<b>16</b>
3. Parcel Mapping	<b>17</b>
4. Parcel Administration	<b>18</b>
5. Public Access	<b>19</b>
6. Zoning Mapping	<b>20</b>
7. Soils Mapping	<b>21</b>
8. Wetlands Mapping	<b>21</b>
9. Institutional Arrangements and Integration	<b>22</b>
10. Election and Administrative Boundary System	<b>22</b>
11. Street Address and Street Network System	<b>23</b>
12. Land Use Mapping	<b>25</b>
13. Natural Resources	<b>25</b>
14. Data Base Design	<b>25</b>
15. Infrastructure and Facility Management	<b>27</b>
<b>F. Integration and Cooperation</b>	<b>28</b>
1. Integrative/Cooperative relationships	<b>28</b>
2. Potential partners/projects.	<b>28</b>
3. Data shared/used.	<b>28</b>
4. Coordination of Funding	<b>28</b>
5. Participation of municipalities and other agencies	<b>29</b>
<b>G. Administrative Standards Not Associated With Foundational Elements</b>	<b>29</b>

**Appendix A – Existing Data Sets – as of July 2010**

## I. EXECUTIVE SUMMARY

### Identification and contact information

Cristina Richards  
GIS Coordinator  
121 W. Main Street  
Port Washington, WI 53074-0994  
Ph 262-284-8262  
Fax 262-284-8268

### Participants in planning process

Ron Voigt – Register of Deeds	(262) 284-8261
Cristina Richards – GIS Coordinator	(262) 284-8262
John Slater – County Board Supervisor	(262) 641-4134
Thomas Meaux – County Administrator	(262) 284-8201
Andrew Struck- Planning and Parks Department Director	(262) 284-8275
Karen Makoutz – Treasurer	(262) 284-8281
Andy Holschbach – Land and Water Management Director	(262) 284-8271
James Johnson – Captain, Sheriff’s Office	(262) 284-8432
Mark Owen – Emergency Management Director	(262) 284-8398
Mark Banton – County Surveyor	(262) 284-8335
Adam Ward – IT Specialist, Technology Resources	(262) 284-8307
Michael Plotkin – City of Mequon Ambulance director	(262) 242-0205
Tom Sykora – Coldwell Banker	(262) 241-4700
Lisa Spaeth – Title Researcher, Chicago Title	(262) 306-2800
Cathy Timm – City Assessor, City of Cedarburg	(262) 375-7608
Randy Tetzlaff – City Planner, City of Port Washington	(262) 284-2600
Kirsten Gruebling, Health Department Director	

### Summary of Plan

This Plan is an update of the existing Plan for land records modernization efforts, which are in accordance with the Wisconsin Land Information Program. The Plan serves to guide policy on how land records are created, maintained and distributed by Ozaukee County. It further is intended to provide county, town and city officials, state agencies, private entities and

any other interested parties with basic knowledge of Ozaukee County's efforts in land records modernization, its potential applications and where the County potentially will be spending its land records fees generated from our participation in the WLIP.

It is the intention that this Plan will provide any reader with a clear, concise direction in locating land records information as well as an understanding of the goals and objectives of Ozaukee County's land records modernization efforts. Because this is a 5-year plan, it is understood that Ozaukee County may amend it as needed to reflect changes in technology, funding and administration.

Ozaukee County has benefited from every aspect of the Wisconsin Land Information Program. The Program has facilitated greater efficiency among county departments and cooperative efforts between the county and local jurisdictions.

## **II. LAND INFORMATION MODERNIZATION AND INTEGRATION PLAN**

### **A. Goals and Objectives**

**Goal:** It is our goal to continue parcel mapping maintenance and use this as a base layer in Ozaukee County's geographic information system (GIS). Ozaukee County obtained countywide digital orthophotography in 1995, 2000, 2005, 2007 and 2010. We hope to update the orthophotography every five years at a minimum. We will continue to develop the spatial framework by gathering global positioning system (GPS) coordinates of the USPLSS coverage, including remonumentation of section corners.

**Goal:** It is also our goal to provide the Sheriff's Office which includes the Division of Emergency Management with datasets which can be utilized for statistical analysis in the event of an emergency. The following potential datasets can be created to assist in this analysis decision making process and reporting activities. The datasets include, severe weather siren locations, infectious diseases, identification of environmental or communicable diseases and/or illness, accidents, crimes, hazardous material sites, plumes, contaminated properties, emergency shelter locations, Fire, EMS and Law Enforcement response zones, soils data, critical infrastructure, etc.

**Goal:** One goal of our GIS is to create a system that links information from all county departments with Land Records System (*LRS*). Our GIS is accessible to all departments, as well as the public via the County G.I.S. website (linked from [www.co.ozaukee.wi.us](http://www.co.ozaukee.wi.us) ). Current available major data layers include: digital orthophotography; parcel maps; transportation infrastructure; soil classifications, USGS Topographic maps, historical orthophotography, Wisconsin Wetlands

Inventory, land use, FEMA floodplains, civil division boundaries, public land survey system, platted lands inventory, planned land use 2035, school district boundaries, fire/emergency service districts, contaminated land delineations and addressing all derived from information obtained within the county. In addition, a listing of other geographic data developed as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County: 2035 (2009) has been included as an appendix. Future layers will include:

Geographic data:

- Shoreland and Floodplain Zoning
- more detailed contours
- POWTS
- Building footprints
- Private wells
- Tree Inventory – Parks System
- Sign Inventory
- Road Right of Way delineations
- Cemetery Mapping
- Supervisory District

Timeline:

in process, complete by 2011  
 not yet determined  
 not determined yet  
 not determined yet  
 not determined yet  
 not determined yet  
 In process, complete by 2012  
 not determined yet  
 not determined yet  
 dependant upon 2010 Census  
 Data availability

The timeline for completing the above objectives is dependent upon the continuation of the WI Land Information Program grants, the amount of retained fees collected and the availability of local tax levy funding.

**Goal:** It is also our goal to provide the Sheriff's Department with the Master Street Address Guide, address and centerline mapping for the countywide public safety records management and computer aided dispatch software system which is being implemented in 2010. A road centerline layer has been developed and the accuracy is being edited and maintained by the land information office. Address points are being verified and edited with latitude and longitude coordinates for use in the computer aided dispatch system. The verification of the addresses and road centerline data shall be completed by fall 2010.

**Goal:** It is our goal to provide this data in the most efficient, accurate and effective manner as possible. The present users of our GIS data include local, county and state offices as well as the general public. We also anticipate many professionals using this data, such as surveyors, realtors, assessors, law enforcement, planners, appraisers, etc. will find the information increasingly useful. By serving the information via the website, it will be in a format accessible to anyone with internet access. Individuals wanting specific datasets will be provided them in the format in

which the data is kept by the county. We also hope to employ two terminals for public access that are available during normal courthouse hours which will be able to access the GIS data.

**Technology Environment and Database Design:** The County's GIS System utilizes ESRI ArcGIS 9.3 software. The County developed the geodatabase design to include the following feature datasets:

1. Parcels
2. Public Land Survey System
3. Political Boundaries i.e. Supervisory Districts, Civil Boundaries, and Annexations
4. Environmental features i.e. hydro (streams, rivers, lakes), floodplain, wetlands and shoreland and floodplain zoning
5. Development features i.e. Generalized Zoning and Land Use and Planned Land Use 2035
6. E-911 addressing

Additional feature classes within the feature datasets will be added as data is developed and/or converted from already existing .DGN files. The feature datasets are edited and/or developed using ArcInfo, extracted from the Geodatabase and utilized in the web server as well as the centralized Countywide Public Safety Software Server.

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

The Land Records Office has completed parcel mapping for the entire county, both incorporated and unincorporated. Parcel maintenance will continue to be ongoing work.

Ozaukee County has selected a Public Safety Records Management (RMS) and Computer Aided Dispatch (CAD) Software System for the Sheriff's Office and Ozaukee County Law Enforcement Agencies. The Land Information Office is currently editing the attribute data for the Road Centerline – address mapping component of the RMS/CAD system. It will include address points, address ranges, road names, alias and more. This project is expected to be fully implemented by December 2010. Address maintenance will be an ongoing process.

In an effort to achieve efficiency, we plan to continue cooperative agreements with the municipalities of Ozaukee County. We have had substantial success with the cooperative efforts between local municipalities and the county. Ozaukee County has initiated the County/Municipal Consortium. The intent of this consortium is to

develop cost-sharing and data-sharing agreements between the County and local municipalities, as well as encourage cost sharing initiatives between local municipalities. In 2010 Ozaukee County incorporated a sign inventory web application for the City of Cedarburg which resides on top of the County GIS website and utilizes the County's GIS data as a backdrop. The City of Cedarburg is in the process of implementing two additional web applications for incorporation to the County website. The Village of Thiensville is developing a similar application. Ozaukee County has currently offered the integration of the web applications with no hosting fees. As more municipalities utilize this cooperate agreement, a minimal fee may be charged to offset the cost of hosting the data.

Ozaukee County has remonumentation of section corners data set with GPS coordinates on said corners. At present, approximately 98% of the county's section corners have GPS coordinates on file with the County Surveyor's Office. Ozaukee County will continue to strive to have full remonumentation of all section corners with GPS coordinates.

We have successfully linked the county's Land Records System database information with the parcel maps and provided public access GIS Website. A website is also available to all county departments that allow access to the owner names of the parcels. Local jurisdictions also can choose to have full access by password. The public website currently restricts access to owner names for the purpose of privacy.

Ozaukee County Register of Deeds has purchased an internet access program and the necessary hardware to access scanned real estate documents and our tract index.

Ozaukee County Treasurer's Office has installed new Land Records System (LRS) software in 2010, which will provide efficiency in maintaining the tax and assessment information. Work flow processes between the Land Information Office and the Tax Description Specialist has been initiated in order to provide better assistance to the local assessors

The Ozaukee County Planning and Parks Department will continue to maintain the Shoreland and Floodplain Zoning database, which includes updates to the navigable stream database for Ozaukee County, the storm water management area database, the County planned land use database and other related natural resource, planning or parks/open space/natural areas databases as part of the Multi-jurisdictional

## C. New Initiatives

**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.)

**2015 Digital orthophotography and planimetric update.** The County is participating in a multi county and regional planning commission digital color orthophotography consortium and is interested in developing an agreement with other agencies for future production of new digital orthophotography. Estimated cost is \$5,000 for digital orthophotography.

**Web Site.** Expand our current Geographic Information System web site for access to land information. Interactive mapping software has been changed from ArcIMS to MapGuide due to the discontinuation of support from ESRI for ArcIMS as well as the cost of the mapping software. Allow connectivity of additional web applications to allow local municipalities to host web applications in conjunction with the County's GIS website and utilize the County's base GIS layers as a backdrop of information for use in their applications. Provide security to the local municipality applications via specific user names and passwords, which allow access to municipal data as determined by the municipality (custodian) of the data. Expand the connectivity to the three existing land information websites, GIS, LRS and Document imaging and allow linkage to additional websites as the need arises. Develop the public access to obtain owner name after initial search by tax key or physical address. Develop the subscriber service within the GIS website which allows the user greater access to the data, i.e. the ability to search by owner name.

**POWTS tracking.** Assist the Land and Water Management Department in incorporating GIS in the inventory, maintenance and compliance tracking system of private onsite waste treatments systems (POWTS). The Land and Water Department has recently, with the assistance from Technology Resources Department, created a web application for this purpose. The Land Information Office will be working with Land and Water to incorporate the newly designed POWTS web application onto the County GIS Website.

**Imaging.** The Register of Deeds plans to expand its imaging operation to include vital records. This has not been done and will not be planned for the future with the advent of the new state system being implemented in 2010 & 2011. But with the passage of Act 314 the Register of Deeds will be capturing images from 1984 to 1935 through 2015

**E-Filing and Recording.** The WI Department of Revenue is piloting a project in Brown County for the electronic filing of the Wisconsin Real Estate Transfer Return form. In addition, the electronic recording of documents (i.e. deeds, mortgages etc) in the Register of deeds is also a possibility. The County will be following these developments and may wish to pursue e-filing and/or e-recording in the next five years depending on the cost, demands and requirements to implement the process and technology. Due to ROD imaging, the Land Information Office will be working on a project to integrate both images and assessment data. Both the DOR project and the Ozaukee document management system have implemented this by the year 2010.

**Topography.** The County has complete coverage of topography at the 2' contour interval level. However, much of this information is dated by 10 years or more. The Land Information Office will update our topography with a LIDAR project. It is anticipated that the mapping will occur over the next five years and estimated to cost \$190,000.

**Incident mapping.** The County plans to evaluate the need and then design databases to assist the Health Department and the Sheriff's Office with mapping incidents related to each of their needs. Examples of these include infectious diseases, identification of environmental or communicable diseases and/or illness, accidents, crimes, hazardous sites, plumes, contaminated properties, emergency shelter locations, Fire, EMS and Police response zones, critical infrastructure etc.

**Easement Mapping.** The County plans to further develop a coverage of easements such as development easements, utility easements, natural resource easements etc. As part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County, the Planning and Parks Department has developed a data layer for conservation easements in the County as of 2007.

**Assessment Data.** The County developed a system which encourages countywide consistency in assessment records. While it is not the intent to make each municipality conform to a set standard, but rather delineate minimum data attribute requirements. The County acknowledges consideration on a State level to provide some consistency and will assist in incorporating any State mandates in this regard.

**Cemetery Mapping.** The County to develop county cemetery data to assist with genealogy research.

**Wetland maps.** The Department of Natural Resources (DNR) and the Southeastern Wisconsin Regional Planning Commission (SEWRPC) jointly updated the Wisconsin Wetland Inventory (WWI) for southeastern Wisconsin in 2005 including all of Ozaukee County. The digital files were incorporated as part

of the Multi-jurisdictional Comprehensive Plan for Ozaukee County and will be incorporated in the online database.

**Highway sign inventory and facilities management.** The County Highway department acquired software and created a basic framework for a sign database for the County Trunk Highway system. The Highway Department would like to collect the location of signs and other facilities relating to management of the highway system within the next 5 years. Ozaukee County intends to investigate the current web application purchased by the City of Cedarburg for this purpose.

**Planning/Land Use/Land Cover.** Ozaukee County – Planning and Parks Department will continue to maintain the Planned Land Use for Ozaukee County 2035 as changes are adopted by local municipalities. The Planning and Parks Department, in conjunction with SEWRPC, as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County developed an existing land use dataset for 2007. In the future, the existing land use will be updated in cooperation with SEWRPC in conjunction with the regional land use updates, which typically occur every 5 years. The Planning and Parks Department, as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County established a cooperative agreement for GIS data sharing, particularly of related land use files including planned land use, existing land use, zoning, etc. The Planning and Parks Department will continue to provide our existing digital data to Cities/Villages/Towns and Southeastern Wisconsin Regional Planning Commission for development of land use plans under this cooperative data sharing agreement where those entities will provide their digital data back to the County for its planning efforts. The County Planning and Parks Department has completed a Multi-jurisdictional Comprehensive Plan for Ozaukee County with assistance of a Comprehensive Planning grant from the Wisconsin Department of Administration. The Planning and Parks Department will continue to be engaged in collecting and manipulation other data sets as needed for planning and parks purposes.

**Road Right of Way Mapping.** The County will create road right of way maps, utilizing data from the Highway department, Certified Survey Maps, Subdivision plats and any other accurate data sources

**Countywide Addressing.** The County will research the potential, feasibility and efficiency in developing a countywide addressing system. The current addressing system allows for inconsistency of addresses due to civil division boundaries and communication between municipal departments and County departments.

**Hardware/software upgrades.** The County and associated Departments plan to upgrade their land records hardware/software as needed and acquire new where our needs assessment determines it is appropriate. We are currently on ESRI

maintenance. Ozaukee County has upgraded from ArcInfo to ArcSDE to manage simultaneous editing and file serving. Future software needs are likely to include ESRI Spatial Analyst and ESRI 3D Analyst.

**Census.** Provide updates to Census as requested and assist County Clerk with future redistricting mapping process as needed.

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

## **2. Assistance requested**

**a)** The County has demonstrated over the years, it has secured the technical assistance needed to carry out our plan. The County has actively sought agencies or consultants prior to implementing projects and will continue to do so for our new initiatives. We currently are staffed with a Land Information Coordinator, responsible for the County's GIS. We are further supported by our TR Department, other county land records departments (i.e. Planning and Parks Department, Land and Water Management Department) and our GIS consultant. The County has Internet connectivity and will connect to the WLIP Internet Land Information Clearinghouse and Technical List Server Service as needed.

It is imperative that the WLIP continues so the retained fees and the grants are available for ongoing and new initiatives in Ozaukee County. It is important for the State Department of Administration to ensure the program continues to be focused on creation and maintenance of land information data sets to support all land information uses not just a select few. The County will seek funding as opportunities arise to help fund our land records activities and will be applying for grants.

It is also imperative that all of the fees the counties send to the State as part of the WLIP is 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 State Department of Administration to increase the education and training grants provided to counties.

The County would like WLIP to provide practical standards along with a functional model for basic data sets. In addition, sample RFP's would be useful.

The County is always looking for other funding opportunities and has made a commitment to modernize its land records by appropriating tax levy dollars to our Plan.

c) The County will continue to follow County ordinances and State statutes for procurement of services/products related to this Plan.

### 3. Problems encountered

We have successfully dealt with unanticipated problems as they occurred. There would be a problem if the Department of Administration adopts policies that would limit the use of WLIP funds for our planned activities or concerns expressed in II. A and C) beginning on page 3. At this time, we are not aware of other problems that would prevent us from proceeding with this Plan, however the County remains concerned about the State budget situation and potential legislation that may have a negative impact on County operation.

### D. Custodial Responsibilities

Following are the Ozaukee 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

- Record 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}

#### REAL PROPERTY

- Prepare and maintain description and ownership information of all parcels of property. {Have}{§70.09}
- Prepare and maintain information on school and other special district codes. {Have}{§70.09}
- Maintain tax rates and special assessments information. {Have}{§70.09}
- Provide computer services related to assessment and taxation {Have}{§70.09}

#### LAND INFORMATION

- Implement the Land Information Plan. {Have} (§59.72)
- Assign addresses countywide. {Have} (Internal Policy)
- Store digital orthophotography {Have} (Internal Policy)

- Maintain existing hard copy parcel maps. {Have}(\$70.09)
- Maintain digital parcel maps. {Have}(\$70.09 & Internal)
- Maintain GIS base map layers. {Have}(Internal Policy)
- Maintain GIS site address database/coverage. {Have}(\$59.54)
- Maintain GIS road sign database. {Have}(\$59.54)
- File aerial photography. {Have}(Internal Policy).
- Maintain Master Street Address Guide (MSAG). {Shared with Sheriff} (§ 146.70 & Internal Policy).
- Maintain historical aerial photography. {Have}(Internal Policy)

## **PLANNING AND PARKS**

- Maintain GIS shoreland and floodplain zoning and related coverage's. {Have}(\$59.69)
- Maintain GIS revised wetlands data layer and FEMA approved floodplain amendments data layer
- Maintain the GIS Ozaukee County Planned Land Use Map: 2035 and all associated amendments {Have} (§66.1001)
- File County land division/subdivision approvals in the unincorporated areas {Have}(Internal Policy)
- File several GIS data layers with regard to the Multi-jurisdictional Comprehensive Plan for Ozaukee County.
- Maintain GIS park, open space and natural area data associated with the County's Park and Open Space Plan
- Maintain GIS farmland preservation data associated with the County Farmland Preservation Plan
- Maintain GIS base map layers for the Multi-jurisdictional Comprehensive Plan for Ozaukee County {Have} (§66.1001)
- Maintain County trail maps/coverage's including multi-use trails and snowmobile trails {Have}(Internal Policy)
- File of GIS database of Bureau of Land Management Islands
- Maintain the County GIS database and mapping for storm water management in the unincorporated, USEPA urbanized area of the County {Have} (NR216).

## **LAND AND WATER MANAGEMENT**

- File soils maps and tables. {}(\*)
- Maintain private sanitary system site plans. {Have}(\$59.69)
- Maintain permit database. {Have}(Internal Policy)
- File wetlands and FEMA maps. {}(Internal Policy)

## **HIGHWAY DEPARTMENT/COUNTY SURVEYOR**

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

- Maintain information on PLSS corners including tie sheets and section summary sheets. {Have}{§59.74} (A-E 7.08)
- File private survey maps. {Have}{§59.74}
- File field notes and other survey source documents. {Have}{§59.74}
- File Gas tax maps. {Have}{Internal Policy}

## **SHERIFF'S OFFICE**

- Maintain Master Street Address Guide (MSAG). {Shared with LIO}{§ 146.70 & Internal Policy}
- Maintain E911 related coverage's. {Have}{Internal Policy}

## **SHERIFF'S OFFICE, DIVISION OF EMERGENCY MANAGEMENT**

- Maintain emergency service network data, maps and coverage's. {Have}{Internal Policy}

## **TREASURER**

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

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

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

**a. Documentation of County data.** The County plans to continue updating and maintaining applicable Metadata.

**b. Resources available.** We will continue to participate in conferences, workshops, seminars, user groups, etc., as appropriate and where budget allows. We will continue to work with our GIS consultant for technical assistance where more assistance is needed.

**c. Identification of customers' needs.** In 2008 the Ozaukee County established the County/Municipal Consortium, made up of representatives from all municipalities. The objective of this consortium is to keep the municipalities informed as to the goals, objective and progress of County activities related to GIS, collaborate activities which are similar in nature, cost share in data acquisition and website hosting and as well share data. This consortium is expected to ongoing in an effort to maintain efficiency and cost effectiveness.

2010 Ozaukee County created the Land Information Council, made up of the following representatives:

- County Supervisor
- Register of Deeds
- Treasurer
- GIS Coordinator
- County Surveyor
- Planning and Parks Department Director
- Land and Water Management Department Director
- Health Department Director
- Sheriff's Office Division of Emergency Management Director
- Representative from the Technology Resources Department
- Representative from the Sheriff's Office
- Representative from a local emergency service provider
- Representative from a local realtor
- Representative from a local title company
- Representative from a local assessor
- Representative from a local municipality

With the Council having representatives from disciplines who have land related interests we are prepared to discuss and prioritize customer needs and implement as budget 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. Ozaukee County staff has been a presenter at several WLIA events and other professional organizations. We will continue to share our experiences with others.

***e. Use of technology to facilitate education and training.*** We have access to Internet based and sequel server training courses and will use other systems as deemed 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. We plan 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 Officer education and training funds.*** The County uses the education and training's funds provided for by the WLIP to enable land records staff to participate in land records seminars, workshops or training.

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

Ozaukee County's data is based on the Wisconsin State Plane Coordinate System (South Zone) which is mathematically relatable to the North American Datum (NAD) 1927 and therefore is able to be geographically referenced for use by others.

**a. Geodetic control networks.** We are monitoring the efforts of the WDOT to implement a virtual GPS network and will assess our needs and participate as we deem appropriate. Coordinate values are available in Ozaukee County, State Plane and Latitude and Longitude. The County assumes the custodial responsibility for the densified control stations.

We plan on using the existing NGS and USGS vertical network for vertical control. Any new stations set by the County would adhere to Third order standards. We are also monitoring the efforts of the WDOT in implementing the vertical network and will assess our needs and participate as we deem appropriate.

**b. Public Land Survey System.** The County has an active corner remonumentation program that complies with the requirements of Wis. Adm. Code AE 7.08 and/or state statute, and we plan to continue the program countywide. We are establishing coordinates on the PLS corners using a combination of conventional survey techniques and GPS technology meeting or exceeding the FGDC Third-order, class I accuracy standard. Coordinates are maintained in the Wisconsin State Plane Coordinate System, (South Zone) which is mathematically relatable to the North American Datum (NAD) 1927. We plan to continue work in areas with heavy development to aid in the development of or updating of parcel maps. The County maintains the custodial responsibility for the PLSS.

**c. Photogrammetric base maps.** The County plans on updating its buildings, roads and trail planimetric features using digital orthophotography in 2005 – 2010. The mapping will adhere to National Map Accuracy Standards for 1"=200' scale mapping. The County intends to maintain the custodial responsibility.

**d. Digital elevation models (DEM).** The County plans to acquire a new DEM as part of the anticipated LIDAR project. The data will be acquired to support National Map Accuracy Standards for 1"=200' scale mapping. The county intends to maintain the custodial responsibility.

**e. Digital Orthophotography (DOP).** The County has participated in a multi county digital orthophotography consortium in 2005, 2007 and 2010 and plans for an update in 5 year intervals as we have done in the past. The photography will

be acquired to support National Map Accuracy Standards for 1"=200' scale mapping or better. The County intends to maintain the custodial responsibility.

**f. Digital Terrain Models (DTM).** The County will acquire DTM's from our digital orthophotography project and or LIDAR project.

**g. Digital Raster Graphics.** We acquired scanned quadrangle maps from USGS and have them as a part of our GIS. We will update them as they are updated by USGS.

**h. Triangulated irregular networks (TIN).** See DEM.

**i. Contours.** The County currently has developed countywide contours but needs financial assistance to update /maintain this data set. The County will monitor technology advances and watch for outside funding opportunities but cannot make any firm commitments to this at this time. It is anticipated that the contours will be created from a LIDAR project to support National Map Accuracy Standards for the appropriate scale.

**j. Satellite Imagery.** We will be evaluating the new satellite imagery technology as a possible tool for base map updates, land classification etc but are unable to make any commitment to the technology at this time.

**k. Ability to support Wireless 911.** The County plans to create and or use existing GIS datasets to support Wireless 911 and since the data is mathematically related to NAD it should be possible to convert the data to other coordinate or geographic reference systems to support Wireless 911. (See also E. 11. I.)

### **3. Parcel Mapping.**

**a. & b. Preparation of Parcel Maps.** Maintenance of parcel mapping continues to be our primary focus. All parcel maps will be referenced to the lines of the public land survey system and will minimally be suitable for planning purposes and in many cases suitable for assisting with land title boundary or survey line determination. Our parcel maps are not intended to be a substitute for a certified land surveyor guaranteeing title to property. Included in the metadata or tabular data base will be information that directs users to the original source document or recorded instrument. We intend to follow the WLIB Digital Parcel Mapping Standard for Index mapping where practical.

**c. Coordinate system used.** The parcel maps will be geodetically referenced to the Wisconsin State Plane Coordinate System, (South Zone) which is mathematically relatable to the North American Datum (NAD) 1927.

**d. Parcel ID.** The present County parcel identification number (PIN) does not fully conform to the WLIB parcel numbering system. However it is based on the standard and is designed so the PIN can be generated to comply with the WLIB requirement and will be populated as the need arises.

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

**a. Design.** Ozaukee County's data base supports integration of digital parcel maps with property and ownership information by linking data through key fields. The TR department uses a Microsoft server 2005 to maintain the tabular data bases relating to various land records and also houses our document imaging system. TR continuously evaluates needs and designs or purchases applications to ensure integration of land records systems and data.

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

*Parcel ID.* The PIN is an attribute in our GIS parcel geodatabase that corresponds to our tabular land records data base on Microsoft Sequel Server

*Tax data.* The tax data base is housed on Microsoft Sequel Server and 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 geodatabase by parcel ID. We intend to use the parcel mapping to assist in 'reverse populating' attributes for the tabular tax data base.

*Site Address.* Individual site address information can be accessed through the Centerline and point address data set and is maintained.

*Owner Name & Address.* This data is maintained in our *LRS tax data base*.

*Description/current document pertaining to parcel.* The current document number of the deed for a parcel is maintained in our imaging data base and the full description can be obtained from the deed. We carry a much abbreviated description in that tax roll data, but due to our many lengthily metes and bounds descriptions it is not possible to include the full description.

*Document Imaging.* Imaging of documents relating to property transactions in the Register of Deeds began in 2004. We plan on inputting documents from prior years in the next five years. Imaging will also be expanded to include or maintain other land records such as permits, tax records, survey maps, certified corner certificates etc.

*Real estate transactions.* The Register of Deeds records these transactions and maintains a tract index and searches can be made by grantor, grantee, legal description or document number. Our Treasurer maintains the tax data base to reflect property tax payment transactions. See note in Section C related to New Initiatives pertaining to electronic filings.

*Easements and restrictions, including conservation easements.* The Register of Deeds records these transactions and maintains a tract index and searches can be made by grantor, grantee, legal description, document number or parcel ID.

*Tax exempt lands.* These are carried as a code in the assessment tax data base and is linked to the GIS parcel coverage.

*Zip Code.* Our tax data base carries the owners mailing zip code.

*Assessment class.* These are carried as a code in the assessment data base according to Department of Revenue assessment classes and is linked to the GIS parcel coverage.

*Public Lands.* Presently our system only tracks these lands under the tax exempt status. The County will seek additional ways to track public lands as well as seek standards for County and Municipal systems.

*Liens.* The Register of Deeds records these transactions and maintains a tract index and searches can be made by grantor, grantee, legal description, document number, or parcel ID.

*Evidence of Title.* The Register of Deeds maintains the current and historic document affect title and maintains a tract index so searches can be made by grantor, grantee, legal description, document number, or parcel ID

## **5. 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 in the land records office and in our remote Department offices. We added the ability to access GIS geodatabases in several offices and plan to expand that capability as well as public access terminals. A County web site was also making our GIS data easily accessible to the public and currently are in the finally process of our new enhanced version. We will continue to monitor developments of the WLIP Internet Land Information Clearinghouse.

**b. Data sharing policies (copyright, licensing, fees etc).** The County remains willing to share our data. The County has a data disclaimer and use policy. Data is provided free of charge to all governmental units. The County has adopted a fee schedule for our data sets. Contact the Land Information for specific information pertaining to acquiring GIS data and tabular tax data.

**c. Open access to data in existing format.** Ozaukee County adheres to the Wisconsin Open Records Law for access to land records.

**d. Optional production of customized data on cost-recovery or other basis.** Ozaukee County offers both tabular and graphic data for purchase in industry accepted interchange formats. Digital data requests are handled through our Land Information Office in cooperation with the custodian of the data. (i.e. various Departments).

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

**f. System security.** The GIS server has built-in security that is managed by a system administrator. The County installed a land records server that sits outside our firewall to protect the integrity of our source land records data. The TR Department maintains a back-up/security plan for all data.

**g. Privacy policies.** Ozaukee County adheres to the Wisconsin Open Records Law and complies with State statutes. We will be monitoring the industry and the public concerns related to privacy and distribution of land record data.

**h. Use of \$2 fee designated for land information and housing data.** The County will continue to use the \$2 to create, develop, update and/or maintain land records data that will be accessible on the Internet and to purchase, upgrade or maintain hardware, software and security necessary to make this information available from the Internet.

## **6. Zoning Mapping**

**a. Shoreland.** The County maintains a GIS zoning coverage which includes navigable waterways and the shoreland area (The area within the following distances from the ordinary high water mark of navigable waters: 1,000 feet from a lake, pond or flowage; and 300 feet from a river or stream or to the landward side of the floodplain, whichever distance is greater) in the unincorporated area of the County and follow the zoning districts adopted by the County Board.

**b. Floodplain and floodway.** The County presently uses the digital FEMA FIRM maps (December 4, 2007). The Planning and Parks Department will maintain a

separate database for approved amendments to the digital FEMA FIRM (2007) as map amendments are proposed and approved by FEMA.

**c. Environmental corridors.** Maintained by SEWRPC available through the OZLIO or Planning and Parks Department. SEWRPC plans an update of the Environmental Corridor file in the next 5 years.

**e. f. g. Burial sites, Archeological sites, Historic/cultural sites.** No plans at this time. As of 2003, the Division of Historic Preservation (DHP) and the State Historical Society of Wisconsin (SHSW) has produced digital geographic datasets relating to: Historic Structures, Archeological Sites, Burial Sites (modern cemeteries and pre-settlement sites), Archeological Survey areas, and Archeological Districts. These datasets are derivatives of the DHP's Wisconsin Historic Preservation Database (WHPD) and are copyrighted original works, which are licensed for use. The State Historical Society of Wisconsin reserves all rights of authorship granted under U.S. and International copyright laws and agreements. The Division of Historic Preservation of the State Historical Society of Wisconsin (SHSW) has custodial responsibility for maintaining these records. The Planning and Parks Department retains a copy of this digital GIS WHPD data from the Wisconsin Historical Society for its own planning, but this database cannot be shared with the general public or other entities under the licensure agreement with the State.

## **7. Soils Mapping**

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

## **8. Wetlands Mapping**

**a. Wetland mapping activities.** The County currently is using the 2005 update of the Wisconsin Wetland Inventory (WWI) as prepared by the WDNR and SEWRPC under a joint cooperative agreement for the southeastern region. The digital GIS files have been incorporated into the County's shoreland and floodplain zoning database. The County also refers to hardcopy map data provided by the NRCS for farmed wetlands, a digital GIS database created by Ozaukee County for inventory of created, restored or enhanced wetlands in the County as of 2002 and an inventory of potentially restorable wetlands (PRW) created in conjunction with the WDNR (2000).

## **9. Institutional Arrangements and Integration**

**a. Formal data sharing agreements.** The County has data sharing arrangements with other County departments, cities, villages and towns, Southeastern Wisconsin Regional Planning Commission, and State agencies. The County will continue these arrangements and pursue others as opportunities arise. The County encourages others to use our digital data by setting a nominal cost or no cost. We encourage cost-free exchanges of information that will enhance our system. We have a formal agreement with WE-Energies for data sharing for electrical and gas systems.

**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. We anticipate cooperative agreements with digital orthophotography production.

**d. Consortia.** The County will evaluate opportunities as they arise.

**e. Collaborative arrangements.** The County actively participates in collaborative arrangements for data creation particularly with other County departments. We plan to continue our participation in the Southeastern Wisconsin Regional Planning Commission LIO 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 we deem applicable.

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

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

**b. County Boundaries.** The County created an approximation of the County boundaries and will be revising them as necessary.

**c. Civil division boundaries.** The County created an approximation of the civil boundaries and will be revising them as necessary.

**d. Utility districts.** The County's tax data base will include a code designating which parcels are within a sewer service area. We can develop graphic

boundaries of the sewer service areas as needed. As part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County, a GIS data layer was created for the formal drainage districts.

**e. Emergency Service Areas.** The County created emergency service zone maps that are maintained in cooperation with our Land Information Office, Sheriff Office and the Sheriff's Office Division of Emergency Management .

**f. & g. Legislative districts & Election.** The County created approximate voting ward, aldermanic, county board and state legislative districts and as parcel maps are updated these district boundaries will have to be revised.

**h. Tax incremented financing districts (TIF).** The County's tax database includes a code designating which parcels are within a TIF. A map will be produced when our parcel mapping is complete. A GIS database and mapping of existing TIF districts was created as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County.

**i. School districts.** The County created an approximate school district boundary map and as we update parcel maps these district boundaries will have to be revised. The County plans to work with the school district to confirm the boundaries. This was updated for the Multi-jurisdictional Comprehensive Plan for Ozaukee County.

**j. Lake Districts.** The County has no lake districts

**k. Census geographies.** These will be added as needed.

**l. Native American lands.** There are no parcels identified as Native American Lands within the County

**m. Agency administrative districts and Zip Codes.** Our GIS has an approximate zip code layer. The Planning and Parks Department also has a zip code database.

**n. Public Administered Lands.** The tax database and the GIS parcel map could be used to determine public administered lands and district boundaries may be developed as the need arises.

## **11. Street Address and Street Network System**

**a. Transportation network - streets, roads, highways, railroads.** The County has contracted for a comprehensive road centerline and point address data set., which includes centerlines of all named public and private roads, Ozaukee Interurban Trail and point addresses in the County.

**b. Rights of way.** The approximate right-of-way of public roads is part of the parcel mapping process.

**c. Centerlines.** The County plans to maintain the data set referred to in 11. a. The County complies with the GIS geodatabase design as the standard for mapping centerlines.

**d. Address ranges.** The County centerline file referred to in 11.a will maintain address ranges based on imaged roadways and other available information to support emergency response applications, wireless 911 and routing applications.

**e. Site address and data base.** The County does not assign site address or road names. We will maintain this information for our 911 functions.

**f. Address point, structure and/or driveway.** The County point address file referred to in 11.a will maintain point addresses based on imaged roadways and other available information to support emergency response applications, wireless 911 and routing applications.

**g. Road names.** The County is not involved in issuing road names. However we will maintain them.

**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 Sheriff's Office Division of Emergency Management maintains landmarks for emergency applications and we will update as deemed necessary.

**j. Integration with the County's/City Master Street Address Guide (MSAG).** The Land Information Office shares the responsibility to create, update and maintain the MSAG with the 911 Coordinator in the Sheriff's Office to ensure consistency and integration and plans to continue that relationship. We adhere to our 911 provider for data standards.

**k. Ability to support emergency planning, response and mapping.** The Land Information Office and Sheriff's Office Division of Emergency Management work together in sharing data sets necessary for emergency applications and we plan to continue this working relationship. We have demonstrated the GIS ability to support emergency application by using it in search and rescue missions, accidents, tornado assessment and training sessions and plan to expand on these applications.

**l. Ability to support Wireless 911.** Developing address ranges, point addresses, data conversion routines and master street address guide data

correlation tables are the immediate land records need for implementation. The County will maintain a GIS base map data set to support Wireless 911 and will assist in developing new data layers as needed to implement the system. Currently there is a need for re-projection and/or conversion of data along with some clean up or addition of attributes. Digital orthophotography will be a significant benefit for Wireless 911 in our forested areas of the county. There may also be a need to obtain adjoining counties data in the event a call would come in outside our county boundary. The County intends to maintain the custodial responsibility and comply with Wisconsin Statutes requirements for implementation as it relates to land records.

## **12. Land Use Mapping**

**a. Mapping of existing land use.** The County utilizes a land use map developed by the SWERPC. This data set is updated every 5 years; however, was updated in 2007 as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County.

**b. Mapping of planned land use.** The County Planning and Parks Department will be responsible for updating the planned land use according to the Multi-jurisdictional Comprehensive Plan for Ozaukee County and State Statute 66.1001.

## **13. Natural Resources**

**a. – d, e, f, h, i. Land cover, Watersheds, Geology, Hydrogeology, Endangered Resources, Environmental Corridors, Natural Areas, Impacts on the Environment.** The County has acquired these GIS layers from the WDNR, SEWRPC or appropriate custodian of the data as has been deemed necessary for a particular application. Most of these resources have been acquired and/or updated as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County. For a complete listing of the natural resource files obtained by the Planning and Parks Department, please refer to the attached appendix.

**g. Non-metallic mining.** The County plans to update and/or maintain the non-metallic GIS layer developed as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County.

## **14. Data Base Design**

**a. Design Evaluation.** The Land Information Office meets with various departments to evaluate design applications and discuss strategies for enhancements or revisions. 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. Implementation, production and maintenance procedure follows.

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

**d. Metadata.** The County plans to continue maintaining the Metadata for our already created GIS layers and create Metadata for newly created layers and data sets.

**e. Security/Privacy.** See Section II. E. 5. f. & g. page 20.

**f. Implementation and Maintenance Strategy.** The County carefully evaluates projects before implementation to ensure stable data set and efficient production. The maintenance varies with projects or layers, however the custodian of the data set is directly involved with data maintenance or the quality control check to maintain data integrity and currency.

**g. Data quality management.** The custodian of the data set is directly involved with data maintenance or the quality control check to maintain data integrity and currency. Technology Resources will assist with developing consistency reports so the data continues to improve.

**h. Needs Assessment.** As new GIS layers are requested, a needs assessment process to aid in the design and implementation is performed to ensure integration and to prevent duplication of efforts.

**i. Data structure and format (e.g. topology).** Topology rules within the ESRI environment are developed as needed for the GIS geodatabases and the software dictates the format of the data.

**j. GIS Data Model.** The GIS data model is driven by the nature of the geodatabase. The ESRI software can generate the GIS model that has been implemented for the geodatabase. The County created a hard copy layout of the parcel data base to assist in the implementation.

**k. Data Dictionary.** The County develops data dictionary for attributing data sets or data collection with our GPS.

**l. Coding schema.** The County uses existing standardized coding schemes whenever possible and maintains other coding schemes in our data dictionary.

**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.** Flow charts are used in the needs assessment process.

**o. Data Conversion.** Our GIS data layers are geographically referenced to enable most data sets to be bi-directionally converted. Our tabular can also be converted to a variety of data 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 data bases whenever practical to promote integration.

The County uses ARCGIS and ARCVIEW as our GIS software and provides data to others in ESRI standard export format.

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

**a. Parks.** Mapped with the parcel data set. A separate database is updated and maintained by the Planning and Parks Department.

**b. Transit systems.** Transit mapping was created as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County. SEWRPC will like provide updates in the future as needed.

**c. Harbors.** The county does not maintain any special mapping of the Port Washington Harbor other than some historic drawing.

**d. Airports.** Airport runways are included and will be maintained with our GIS transportation feature class.

**e. Recreational Trails.** The County will continue to maintain bicycle, pedestrian, snowmobile, and other major named trails (Ozaukee Interurban Trail) layer in our geodatabase. A separate database is updated and maintained by the Planning and Parks Department.

**f. Utilities.** Utilities will be responsible for creating their own data set; however, the County will make our base map data available to utilities, sanitary districts, etc. Ozaukee County does have a formal agreement with We-Energies for data sharing.

**g. Government facilities.** The Land Information Office keeps the digital files of the county's buildings.

**h. Hazardous materials sites.** The Sheriff's Office Division of Emergency Management will continue to maintain a data base for this information.

**i. Landfills.** The County created a database as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County containing information on historic landfills in the County. The County may also collaborate with the WDNR to obtain additional data for active landfills.

**j. Bridges, culverts, traffic road signs.** The County desires to inventory these features and the Highway Department has the basic GIS frame work in place to begin, which will include location using a resource grade GPS. The Planning and Parks Department, in conjunction with the Highway Department, did begin to inventory culverts as part of two major initiatives including: the County storm water management area in the urbanized and unincorporated area of the County and the Fish Passage Program within the Milwaukee River Watershed.

**k. Boat landings.** Most of the boat landings and canoe/kayak launches have been inventoried and mapped as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County and the update to the Park and Open Space Plan for Ozaukee County (2011).

## **F. Integration and Cooperation**

**1. Integrative/Cooperative relationships.** Ozaukee 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. The County plans to continue these relationships as we deem appropriate.

**2. Potential partners/projects.** We are always open to discussing with potential partners for development, update or maintenance of any land records data set, please contact us. We have, are in the process of, or interested in developing relationships for digital orthophotography production; forest stand digital mapping; parcel mapping; addressing; census; historic aerial photography scanning; sign inventory, etc. Potential partners would be USEPA, NOAA, BLM, NRCS, WLIB, State Cartographer, DNR, Cities, Village, Towns, WisDOT, Highway Department, Planning and Parks Department and SEWRPC.

**3. Data shared/used.** The digital County base map is being shared and used for the common registration of data sets. The horizontal control network, PLSS coordinates and our resource grade GPS receiver would be available for partners in data acquisition. The County is very open to sharing of data.

**4. Coordination of funding.** The County has made a very concerted effort to share the land records fees with all County land related offices to implement land records modernization and will continue to involve all land records departments.

**5. Participation of municipalities and other agencies.** The County has a positive working relationship with our cities, villages and towns. We plan to continue providing hard copy address maps, aerial photography, shoreland and floodplain zoning, base map and other types of maps to them for their use. The digital data is also available to them and in many instances the city, village or town assessor has obtained various digital data sets to assist in their work. Our Land Records Internet site will significantly improve access to digital data. We like wise will continue to make data available to public agencies to aid in their work.

## **G. Administrative Standards Not Associated With Foundational Elements.**

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 State Department of Administration (DOA) access to WLIP funded books, records and projects for inspection and audit upon reasonable notice by the Board. 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 DOA agrees to facilitate technical assistance to the County including an online Technical Assistance Service.
6. The DOA 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 DOA agrees to review funding requests and to provide guidance to local government with respect to the development of such requests.
9. The DOA agrees to make available electronically an Annual Report regarding the status of the Wisconsin Land Information Program and the activities of the DOA

**WHEREAS**, a Land Records Modernization Plan was created and approved in 2005 to allow participation in the Wisconsin Land Information Program;

**WHEREAS**, this 2005-2010 Plan is to be updated and replaced by this Plan;

**NOW THEREFORE BE IT RESOLVED**, that the Ozaukee County Land Information Council recommend that the Ozaukee County Environmental Land Use Committee and the Board of Supervisors approves this updated Ozaukee County Land Records Modernization Plan.

OZAUKEE COUNTY LAND INFORMATION COUNCIL

\_\_\_\_\_  
John Slater, County Board Supervisor

\_\_\_\_\_  
Ron Voigt, Register of Deeds

\_\_\_\_\_  
Karen Makoutz, Treasurer

\_\_\_\_\_  
Cristina Richards, GIS Coordinator

\_\_\_\_\_  
Mark Banton, County Surveyor

\_\_\_\_\_  
Andrew Struck, Planning and Parks Department Director

\_\_\_\_\_  
Andy Holschbach, Land and Water Management Department Director

\_\_\_\_\_  
Kirsten Gruebling, Health Department Director

\_\_\_\_\_  
Mark Owen, Emergency Management Director

\_\_\_\_\_  
Representative from the Technology Resources Department

---

Representative from the Sheriff's Office

---

Michael Plotkin, City of Mequon Ambulance Director

---

Tom Sykora, Coldwell Banker

---

Lisa Spaeth, Title Examiner – Chicago Title

---

Cathy Timm, City of Cedarburg Assessor

---

Randy Tetzlaff, City of Port Washington Director of Planning and  
Development

# APPENDIX A

## Existing Datasets as of July 31, 2010

### **Parcels**

- Parcel Lines
- Parcel Polygons
- Subdivision/CSM Polygons
- Parcel Annotation
- Civil Divisions

### **Public Land Survey System**

- Section Lines
- Quarter Section Lines
- Town Boundary Lines
- Section Polygons
- Quarter Section Polygons
- Section Corners

### **Address Mapping/Computer Aided Dispatch**

- Emergency Service Zones
- Address Points
- Road Centerlines
- Intersection Points
- Responder Zones i.e. Police, Fire, EMS
- Wireless Antenna Sites

### **Population, Household, and Employment**

- Population Distribution in the Ozaukee County Planning Area: 2000
- Median Household Income by Community in the Ozaukee County Planning Area: 1999
- Planned Urban Service Areas in the Ozaukee County Planning Area: 2035
- Incremental Urban Development in the Ozaukee County Planning Area: 1990-2000
- Areas of Work in Ozaukee and Washington Counties: 2000
- Place of Residence of Milwaukee County Residents Working in Ozaukee and Washington Counties: 2000

## **Agricultural Resources**

- Agricultural Soil Capability in the Ozaukee County Planning Area
- Land Evaluation Rating for Cropland in the Ozaukee County Planning Area
- Soil Erosion Potential for Agricultural Land in the Ozaukee County Planning Area
- Farm Drainage Districts in Ozaukee County: 2007
- Agricultural Lands in the Ozaukee County Planning Area: 2000
- Enrolled Farmland Preservation Program Lands in the Ozaukee County Planning Area: 2005
- Parcels Included in the LESA Analysis for Ozaukee County: 2007
- LESA Scores for Agricultural Parcels in the Ozaukee County: 2007

## **Natural Resources**

- General Soil Associations in the Ozaukee County Planning Area
- Saturated Soils in the Ozaukee County Planning Area
- Physiographic Features and Generalized Topographic Characteristics in the Ozaukee County Planning Area
- Generalized Depth to Bedrock in the Ozaukee County Planning Area
- Significant Geological Sites in the Ozaukee County Planning Area: 1994
- Summary of Lake Michigan Shoreline Erosion and Bluff Stability Analysis in the Ozaukee County Planning Area: 1995
- Potential Sources of Sand, Gravel, Clay, and Peat in the Ozaukee County Planning Area: 2006
- Areas with Potential as Sources of Crushed or Building Stone in Ozaukee County Planning Area: 2006
- Nonmetallic Mining Sites in the Ozaukee County Planning Area and Environs: 2006
- Watershed Features in the Ozaukee County Planning Area
- Hydrologic Monitoring Stations in the Southeastern Wisconsin Region: 1996
- Surface Waters, Wetlands, and Floodplains in the Ozaukee County Planning Area
- Dams in the Ozaukee County Planning Area: 2006
- Sites Providing Public Access to Surface Waters in Ozaukee County: 2006
- Wetland Restorations in the Ozaukee County Planning Area: 2002
- Depth to Shallow Water Table in the Ozaukee County Planning Area
- Potential for Groundwater Contamination in the Ozaukee County Planning Area
- Woodlands and Managed Forest Lands in the Ozaukee County Planning Area
- Natural Areas in the Ozaukee County Planning Area and Environs: 1994
- Critical Species Habitat Sites and Aquatic Habitat Sites in the Ozaukee County Planning Area and Environs: 1994
- Ecological Landscapes in the Ozaukee County Planning Area
- Important Bird Areas (IBA) Located in Ozaukee County: 2007
- Stream Passage Impediments Located in Ozaukee County: 2006
- Pre-Settlement Vegetation in the Ozaukee County Planning Area: 1836
- Invasive Plant Species Found in Ozaukee County: 2007
- Environmental Corridors and Isolated Natural Resource Areas in the Ozaukee County Planning Area: 2000
- Wisconsin DNR 2 Foot Contours

- Hydro Polygons
- Existing County, State, and Federal Park and Open Space Sites in the Ozaukee County Planning Area: 2005
- Existing Local Government and Public School District Park and Open Space Sites in the Ozaukee County Planning Area: 2005
- Existing Privately-Owned Park and Open Space Sites in the Ozaukee County Planning Area
- Lands Under Protective Easements in the Ozaukee County Planning Area: 2005
- Protected Environmental Corridors in the Ozaukee County Planning Area: 2007
- Categories of Water Recharge Potential in the Ozaukee County Planning Area: 2009
- Constraints to Sand and Gravel Extraction in the Ozaukee County Planning Area: 2007
- Constraints to Extraction of Stone in the Ozaukee County Planning Area: 2007
- Navigable Streams, Rivers and Public Water Bodies: WDNR Edited
- Storm Water Management
- Soil Survey (SSURGO)
- FEMA Floodplain Hazard (100 Year)

### **Cultural Resources**

- Historic Sites and Districts Listed on the National and State Registers of Historic Places in the Ozaukee County Planning Area: 2005
- Local Landmarks in the Ozaukee County Planning Area: 2005
- Historical Markers and Green Bay Ethnic Heritage Trail in the Ozaukee County Planning Area: 2006
- Mid-Lake Michigan Region Maritime Trail Points of Interest in Ozaukee County: 2007
- Catalogued Burial Sites in the Ozaukee County Planning Area: 2007
- Native American Features in the Ozaukee County Planning Area Identified From the U.S. Public Land Survey: 1834-1836

### **Land Use**

- Historical Urban Growth in the Ozaukee County Planning Area: 1850-2000
- Existing Land Use in the Ozaukee County Planning Area: 2000
- Residential Development in the Ozaukee County Planning Area: 2000-2005
- Generalized Land Uses in the Ozaukee County Planning Area: 2007
- Urban Development Outside of Planned Urban Service Areas in the Ozaukee County Planning Area: 2000-2007
- City and Village Planning Areas for the Ozaukee County Multi-Jurisdictional Comprehensive Plan: 2035
- Natural Limitations to Building Site Development in the Ozaukee County Planning Area
- Natural Limitations to Building Site Development and Existing Land Use in the Ozaukee County Planning Area
- Environmentally Sensitive Lands in the Ozaukee County Planning Area
- Environmentally Sensitive Lands and Existing Land Use in the Ozaukee County Planning Area
- Planned Land Uses in the Ozaukee County Planning Area: 2035

## **Transportation**

- Arterial Streets and Highways in the Ozaukee County Planning Area: 2001
- Fixed-Route Bus and Connecting Shuttle Service Provided by the Ozaukee County Express Bus System: January 2006
- Service Areas for the Ozaukee County Shared-Ride Taxi Service: 2006
- Bicycle Ways in the Ozaukee County Planning Area and Environs: 2005
- Railways in the Ozaukee County Planning Area and Environs: 2005
- Private Use Airports and Heliports in the Ozaukee County Planning Area: 2005
- Functional Improvements to the Arterial Street and Highway System in Ozaukee County Planning Area: Year 2035 Regional Transportation System Plan
- Jurisdictional Highway Element for the Ozaukee County Planning Area: Year 2035 Regional Transportation System Plan
- Public Transit Element for the Ozaukee County Planning Area and Environs: Year 2035 Regional Transportation System Plan
- Bicycle Way System Element of the Year 2035 Regional Transportation System Plan for the Ozaukee County Planning Area

## **Utilities and Community Facilities**

- Planned Sanitary Sewer Service Areas and Areas Served by Sewer in the Ozaukee County Planning Area
- Areas Served by Public and Private Water Utilities in the Ozaukee County Planning Area: 2005
- Existing Stormwater Management Facilities in the Ozaukee County Planning Area: 2005
- Major Natural Gas Pipeline in the Ozaukee County Planning Area: 2005
- Wireless Antenna Sites in the Ozaukee County Planning Area: 2005
- Former Solid Waste Facilities in the Ozaukee County Planning Area
- Hospitals and Special Medical Centers in the Ozaukee County Planning Area: 2006
- Government and Public Institutional Centers in the Ozaukee County Planning Area: 2005
- Law Enforcement Stations and Service Areas in the Ozaukee County Planning Area: 2005
- Fire Stations and Fire Department Service Areas in the Ozaukee County Planning Area: 2005
- Emergency Medical Service Zones in the Ozaukee County Planning Area: 2005
- Dispatch Centers in the Ozaukee County Planning Area: 2005
- Public and Private Schools and Public School Districts in the Ozaukee County Planning Area and Environs: 2005
- Cemeteries in the Ozaukee County Planning Area: 2000
- Child Care Facilities in the Ozaukee County Planning Area: 2005
- Nursing Homes and Retirement Communities in the Ozaukee County Planning Area: 2005
- Assisted Living Facilities for Persons with Disabilities in the Ozaukee County Planning Area: 2006
- Projected Areas Served by Municipal and Other than Municipal, Community Water Supply Systems in the Ozaukee County Planning Area: 2035
- Self-Supplied Industrial, Commercial, Institutional and Recreational, Agricultural, and Irrigation Water Supply Systems in the Ozaukee County Planning Area: 2035

- Fire Station Service Radii in the Ozaukee County Planning Area: 2007
- Gas/Electric Lines - 2007

### **Economic Development**

- Job Distribution in the Ozaukee County Planning Area: 2000
- Major Employment Locations in the Ozaukee County Planning Area: 2006
- Business Parks in the Ozaukee County Planning Area: 2007
- Environmentally Contaminated Sites in the Ozaukee County Planning Area: 2006
- Tax Incremental Finance Districts in Ozaukee County Communities: 2007

### **Intergovernmental Cooperation**

- City of Mequon Planned Land Use Map: 2035
- City of Port Washington Planned Land Use Map: 2035
- Village of Belgium Planned Land Use Map: 2035
- Village of Fredonia Planned Land Use Map: 2035
- Village of Grafton Planned Land Use Map: 2035
- Village of Newburg Planned Land Use Map: 2035
- Village of Saukville Planned Land Use Map: 2035
- Village of Thiensville Planned Land Use Map: 2035
- Town of Belgium Planned Land Use Map: 2035
- Town of Cedarburg Planned Land Use Map: 2035
- Town of Fredonia Planned Land Use Map: 2035
- Town of Grafton Planned Land Use Map: 2035
- Town of Port Washington Planned Land Use Map: 2035
- Town of Saukville Planned Land Use Map: 2035
- City of Cedarburg Planned Land Use Map: 2025
- Summary of Conflicts between City/Village and Town/County Land Use Plan Maps

### **Plans and Ordinances**

- Regional Land Use Plan as It Pertains to the Ozaukee County Planning Area: 2035
- Planning Areas Used in Adopted City and Village Land Use, Master, and Comprehensive Plans in the Ozaukee County Planning Area: 2005
- Farmland Preservation Areas Designated in Adopted Local Land Use and Master Plans
- City and Town of Port Washington Boundary Agreement: 2004
- Public Transit Element of the Recommended Regional Transportation System Plan: Year 2035
- Off-Street Bicycle Paths and Surface Arterial Street and Highway System Bicycle Accommodation Under the Recommended Year 2035 Regional Transportation Plan
- Shoreland and Floodplain Zoning in Unincorporated Areas in the Ozaukee County Planning Area: 2010
- Generalized Zoning in the Ozaukee County Planning Area: 2000

- Extraterritorial Plat Review Jurisdiction for Cities and Villages in the Ozaukee County Planning Area: 2007
- Planning Area for the Ozaukee County Multi-Jurisdictional Comprehensive Plan