

OZAUKEE
COUNTY

LAND RECORDS MODERNIZATION PLAN

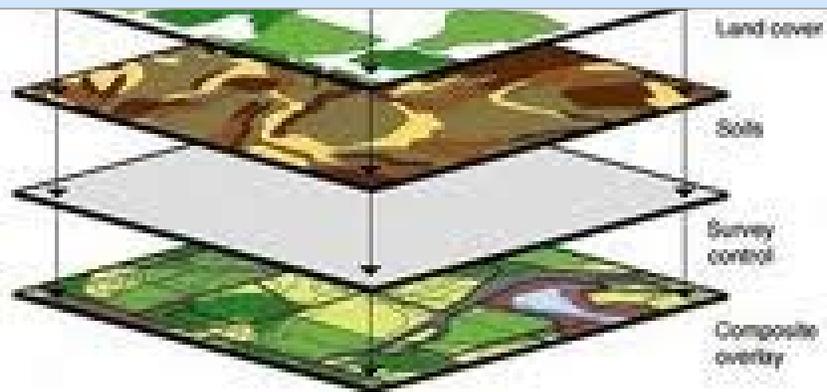


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EXECUTIVE SUMMARY

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

WLIP Background. The WLIP, administered by the Wisconsin Department of Administration, is funded by document recording fees collected by register of deeds at the county-level. The program provides over \$9 million annually to Wisconsin counties for the modernization of local land records. In 2015, Ozaukee County received \$1,300 in WLIP grants and retained a total of \$__ million in local register of deeds document recording fees for land information. Beginning in 2016, WLIP Strategic Initiative grants are projected to increase the county land information budget by \$50k per year.

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

Land Information in Ozaukee County. Land information is central to county operations, as many essential services rely on accurate and up-to-date geospatial data and land records. A countywide land information system supports planning, conservation, emergency planning and response, and a host of other citizen services. The Ozaukee County land information system integrates and enables efficient access to information that describes property boundaries, document imaging, tax assessment information.

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

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

1. Convert all data to modern horizontal and vertical datums
2. Update datasets established with the Comprehensive planning process of 2007
3. Improve and/or integrate Computer Aided Dispatch related data in the Sheriff’s Department
4. Continue to centralize geographic data from various departments into a central repository for easy access as well as access to the most current dataset
5. Document imaging improvements
6. Website development, cooperation with local Municipalities, and hosting for improved access to land records

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

1 INTRODUCTION

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

The WLIP and the Land Information Plan Requirement

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

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

Any grants received and fees retained for land information through the WLIP must be spent consistent with the county land information plan.

Act 20 and the Statewide Parcel Map Initiative

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

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

Ozaukee County's Land Records Modernization Plans were initially updated every five years. However, as a result of Act 20, counties must update and submit their plans to DOA for approval every three years. 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

LAND INFORMATION

Any physical, legal, economic or environmental information or characteristics concerning land, water, groundwater, subsurface resources or air in this state.

'Land information' includes information relating to topography, soil, soil erosion, geology, minerals, vegetation, land cover, wildlife, associated natural resources, land ownership, land use, land use controls and restrictions, jurisdictional boundaries, tax assessment, land value, land survey records and references, geodetic control networks, aerial photographs, maps, planimetric data, remote sensing data, historic and prehistoric sites and economic projections.

– Wis. Stats. Section 16.967(1)(b)

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.

County Land Information System History and Context

In February 1990 The Ozaukee County Board of Supervisors created a Land Information Office pursuant to Section 59.88 of the Wisconsin State Statutes. To provide policy oversight, the Board also created a Land Information Committee comprised of County Board Supervisors. In June 1991, the Board requested the Southeastern Wisconsin Regional Planning Commission (SEWRPC) to prepare a 5 year plan for the implementation of a modernization program. SEWRPC produced Community Assistance Planning Report #142, A Land Information System Plan for Ozaukee County. Subsequently, the plan was approved by the Board in May 1992.

The modernization program proposed by the plan involved the development of a fundamental base map upon which a computerized Geographic Information System (GIS) could be built. This map consisted of the following elements:

- Recovery/Monumentation, where necessary, of all United States Public Land Survey (PLSS) section corners and quarter corners.
- Establish state plane coordinated on all USPLS corners and quarter corners
- Establish vertical elevations on all USPLS corners and quarter corners.
- Acquire digital topographic and planimetric mapping at National Map Accuracy standards for 1"=200' with 2' contours for the entire county.
- Acquire digital cadastral mapping for the entire county.

Since the development of the fundamental base map, the county has developed and/or included addition datasets into a central repository such as flood plain hazard areas, platted lands, civil division, addressing, and shoreland zoning.

Plan Participants and Contact Information

This plan was prepared by the Land Information Council, and others as listed below.

Ozaukee County Land Information Council				
Name	Title	Affiliation	Email	Phone
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2 CURRENT & FUTURE PROJECTS

Convert all data to modern horizontal and vertical datums

Project Description/Goal

This project will update and reestablish the basis of horizontal control for the Public Land Survey System (PLSS) to the North American Datum of 1983-2011 and the vertical control to the North American Vertical Datum of 1988-2012. Once the new control network is established, all existing data will be converted.

Business Drivers

This project is required to better accommodate integration of Ozaukee County data with other data generated by State and Federal agencies who have already adopted the new datums. In addition, this project is required to meet Benchmark 4 as defined in the [Version 1 Statewide Parcel Map Database Project](#).

Objectives/Measure of Success

This project will be successful when the new control system is established.

Project Timeframes

Due to staff and funding restrictions, it is anticipated that this project will take a total of 3 years to complete. Milestones will be developed and monitored that will relate to a Survey Township based project plan.

Responsible Parties

Project oversight will be provided by the Land Information Officer. The staff at the Southeastern Wisconsin Regional Planning Commission, acting as County surveyor, will be responsible for completing the project.

Estimated Budget Information

Project	Item	Unit Cost	Cost	Total Project Cost
1. Convert to NAD83-2011 Horizontal datum	Contract with SEWRPC		36,040	36,040
2. Convert to Vertical NAVD88-2012	Contract with SEWRPC		26,641	36,641
			GRAND TOTAL	\$62,681

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

It should be noted that the coordinates to be established during the conversion to the NAD83-2011 horizontal datum project will be new a mixture of survey observed and computed points, with a resulting accuracy equivalent to the system currently in use at Ozaukee County. The output from the conversion to NAVD88-2012 horizontal datum will be a map showing the various conversion values to be applied throughout Ozaukee County.

Update Datasets from the Comprehensive Planning process of 2007

Project Description/Goal

Convert and/or update datasets which were developed during the Comprehensive Planning process, place them into the central repository geodatabase for maintenance and make them available to the public, local or private entities via the Internet. Impacts Foundational Elements: Land Use, 2035 Land Use, navigable waters, parks and open spaces, and Other Layers.

Business Drivers

- County comprehensive data lacks an organized location of datasets information, making it less accessible.
- Maintenance of the datasets is complicated by multiple datasets being edited, making the most current and accurate datasets more difficult to determine.
- Increase efficiency of Planning Department
- Assist local Municipalities with decision making tools
- Increase access of data layers to the stakeholders

Objectives/Measure of Success

- Easy access to current and accurate datasets
- Available on the county website

Project Timeframes

Milestone	Duration	Date
Project start	–	March 1, 2016
Identify datasets to be incorporated into central repository	1 month	March 1- April 30 2016
Convert datasets from existing format to geodatabase format	18 months	April 30, 2016- October 1, 2017
Merge datasets into County SDE Geodatabase	2months	October 1-November 30, 2017
Integrate datasets onto the County GIS Website	1 month	Dec 31, 2017

Responsible Parties

GIS Coordinator/LIO (45%), GIS Technician (45%), Director of Planning and Parks (10%)

Estimated Budget Information

Project	Item	Unit Cost	Cost	Total Project Cost
3. Identify datasets to be incorporated into central repository	Staff Salaries		TBD	TBD
4. Convert to or develop Datasets in Geodatabase	Staff Salaries		TBD	TBD

format				
a. Merge datasets into County SDE Geodatabase	GIS Coordinator proportionate salary	TBD	TBD	-
b. Integrate datasets onto the County GIS Website	Contracted Service with GIS Website vendor	TBD	TBD	-
				-
			GRAND TOTAL	TBD

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

Improve and/or integrate Computer Aided Dispatch related data

Project Description/Goal

Convert and/or update datasets which were developed for the Computer Aided Dispatch (CAD) program in 2010., Allow the integration of the County parcel information, which is maintained on a daily basis, to be integrated regularly into the CAD and increase the accuracy of the address points, road centerlines, ESN zones and parcel data. Impacts Foundational Elements: Emergency Management, Parcel Mapping, Address points and road centerlines/MSAG, building footprints and Other Layers.

Business Drivers

- County Computer Aided Dispatch lacks integration of the County maintained datasets for address points, road centerlines and parcel, which decreases the accuracy of the information used in CAD.
- Maintenance of the datasets is complicated by multiple processes for editing CAD data, thus creating multiple datasets, each with varying accuracy.
- Duplication of efforts in maintaining datasets in multiple departments. Need to utilize data maintained in Land Information in such a way it eliminates multiple editors of data but rather integrates the data for use in the Sheriff's department.
- Assist local Municipalities with accurate CAD data

Objectives/Measure of Success

- CAD Datasets updated nightly to reflect changes in parcel, address and road centerline data automatically.
- Cost saving in staff time

Project Timeframes

Milestone	Duration	Date
Project start	-	TBD
Identify data needs and integration potential of existing maintained datasets	TBD	TBD
Determine hardware and software needs to allow for CAD to access maintained datasets in the SDE Geodatabase	TBD	TBD
\\	TBD	TBD
Implement Hardware and software		

Responsible Parties

GIS Coordinantor/LIO (60%), GIS Technician (30%), Sheriff's Department Staff (10%)

Estimated Budget Information

Project	Item	Unit Cost	Cost	Total Project Cost
1. Identify data needs and integration potential of existing maintained datasets	Staff Salaries		TBD	TBD
2. Determine hardware and software needs to allow for CAD to access maintained datasets in the SDE Geodatabase	GIS Coordinator proportionate salary		TBD	TBD
3. Implement Hardware and software	Contracted Service with GIS Website vendor		TBD	TBD
			GRAND TOTAL	TBD

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

Centralize Geographic Data from Various Departments into One Repository

Project Description/Goal

Integrate datasets such as personal geodatabases, AutoCAD, and MicroStation files developed and used in County departments with the County SDE Geodatabase. Allow departments to utilize data from other departments to will assist them with decision making and general data needs. Impacts Foundational Elements: Parcel Mapping, Address points and road centerlines/MSAG, building footprints, PLSs and Other Layers.

Business Drivers

- Inability of County staff to locate datasets and determine the latest version of the dataset.
- Maintenance of the datasets is complicated by multiple copies of datasets, thus creating lack of confidence in the dataset accuracy and completeness.
- Requests for datasets, maps, etc is delayed or provided with outdated information

Objectives/Measure of Success

- Ability of Staff to confidently know the location of the most current, accurate and complete dataset.
- Ability to have multiple editors to datasets utilizing the SDE geodatabase environment.
- Cost saving in staff time

Project Timeframes

Milestone	Duration	Date
Project start	–	TBD
Identify datasets to be incorporated into central repository	TBD	TBD
Convert and/or develop datasets	TBD	TBD
Provide access via network to multiple departments with varying levels of permission, i.e. view, edit, etc.	TBD	TBD
Allow access via GIS website with permissions set by custodians		

Responsible Parties

GIS Coordinator/LIO (60%), GIS Technician (30%), Other County Department Staff (10%)

Estimated Budget Information

Project	Item	Unit Cost	Cost	Total Project Cost	
1. Identify datasets to be incorporated into central repository	Staff Salaries		TBD	TBD	-
2. Convert and/or develop datasets	GIS Coordinator proportionate salary		TBD	TBD	-
3. Provide access via network to multiple departments with varying levels of permission, i.e. view, edit, etc.	IT And Land Information Staff Salaries		TBD	TBD	-
4. Allow Access via GIS Website with permissions set by custodians.	Contracted Service with GIS Website vendor		TBD	TBD	-
			GRAND TOTAL	TBD	

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

Document Imaging Improvements

Ozaukee County will continue to improve Document imaging in regards to plats, documents in the Register of Deeds, tie sheets and other documents as needed. It is an ongoing activity to transfer hard copies to digital format for incorporation within GIS.

Website Development, Cooperation with local Municipalities for Access

Ozaukee County will continue to be a leader in County/local Municipal cooperation in sharing of the GIS website in order to promote cost effectiveness and data sharing initiatives.

3 FOUNDATIONAL ELEMENTS

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

In the past, Foundational Elements were selected by the Wisconsin Land Information Board under the guiding idea that program success is dependent upon a focus for program activities. Thus, the Uniform Instructions place priority on certain elements, which must be addressed in order for a county land information plan to be approved.

FOUNDATIONAL ELEMENTS

- PLSS
- Parcel Mapping
- LiDAR and Other Elevation Data
- Orthoimagery
- Address Points and Street Centerlines
- Land Use
- Zoning
- Administrative Boundaries
- Other Layers

Beyond the county's use for planning purposes, Foundational Element information is of value to state agencies and the WLIP to understand progress in completion and maintenance of these key data layers.

PLSS

Public Land Survey System Monuments

Layer Status

- 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
- 100% of Ozaukee County monuments have documented accuracy. The Ozaukee County Remonumentation project was completed in two primary phases, one being completed by Kapur and Associates and the other by Southeast Wisconsin Regional Planning Commission. Ozaukee County invested funds to obtain survey-grade coordinated for 100% of the section corners in the County.
- We are establishing coordinates on the PLSS corners using a combination of conventional survey techniques and GPS technology meeting or exceeding the FGDC Third-order, class I accuracy standard
- Ozaukee County has scanned and categorized all tie sheets recorded at the Ozaukee County Highway Department
- Ozaukee County has public access to the tie sheets but plans to revise this access and make them accessible via the GIS Website.
- 100% of survey-grade corners have been integrated into the digital parcel layer
- The PLSS corners along each of the county boundaries were included with our remonumentation program
- Ozaukee County plans to collaborate with neighboring counties for PLSS updates on shared county borders

Custodian Highway Department

Maintenance Highway Department

Standards

- Statutory Standards for PLSS Corner Remonumentation
 - s. 59.74, Wis. Stats. Perpetuation of section corners, landmarks.
 - s. 60.84, Wis. Stats. Monuments.
 - Wis. Admin. Code Ch. A-E 7.08 U.S. public land survey monument record.
 - Wis. Admin. Code Ch. A-E 7.06 Measurements.
 - s. 236.15, Wis. Stats. Surveying requirements.
- Wisconsin County Surveyor's Association survey-grade standard:

Coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by s. 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision.

Other Geodetic Control and Control Networks

Layer Status

Custodian

Maintenance

Standards

Parcel Mapping

Parcel Geometries

Layer Status

- The Ozaukee County Parcel Layer is 100% complete, utilizing a geodatabase format
- The parcel maps are reference to the Wisconsin State Plan Coordinate System (South Zone) which is mathematically relatable to the North American Datum (NAD) 1927
- The Ozaukee County Parcel Polygon dataset is linked to the County Tax Assessment role using the Parcel Identification (Tax key) number. There are no other attributes included in the parcel polygons.
- At this time there are no plans to implement the Esri parcel fabric data model but as technology changes Ozaukee County would consider implementing the data model.

Custodian Land Information Office

Maintenance Land Information Office

Standards and Documentation

- Data Dictionary
Ozaukee County has a data-dictionary available to the public by accessing the help icon on the Land Records System. This section of the website assists the user with the terminology used on the property summary page and subsequent assessment and tax detail pages.

Assessment/Tax Roll Data

Layer Status

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

Custodian Treasurer/Register of Deeds Office

Maintenance Treasurer/Register of Deeds Office

Standards

- s. 73.03(2a), Wis. Stats. Department of Revenue Powers and Duties Defined. Department of Revenue Property Assessment Manual – Chapter 5 and format standard requested for assessment/tax roll data
- s. 59.72(2)(a), Wis. Stats. Presence of all nine “Act 20” attributes
- s. 59.72(2)(a), Wis. Stats. Crosswalk of attributes

“Act 20” Attributes Required By s. 59.72(2)(a)	Field Name(s) in County Land Info System	Notes on Data or Exceptions to DOR Standard
Assessed value of land	Land Value	
Assessed value of improvements	Improvement Value	
Total assessed value	Total Value	
Class of property, as specified in s. 70.32 (2)(a)	Code	We have a separate field for Description of Code
Estimated fair market value	Estimated Fair	

	Market Value	
Total property tax	Total Due	
Any zoning information maintained by the county	N/A	
Any property address information maintained by the county	Site Address	
Any acreage information maintained by the county	Acres	

Non-Assessment/Tax Information Tied to Parcels

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

Layer Status

Custodian

Maintenance

Standards

ROD Real Estate Document Indexing and Imaging

Status

- **Grantor/Grantee Index.** Ozaukee County is using the services FIDLER for our Grantee/Grantor Index
- **Tract Index.** Ozaukee County tract index has been Parcel pin-based since 1982
- **Imaging.** Ozaukee County also utilizes the services of Fidler for all our document imaging needs as well.

Custodian: Register of Deeds Office

Maintenance: Register of Deeds Office

Standards

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

LiDAR and Other Elevation Data

LiDAR

Layer Status

- In April 2015 Ozaukee County Purchased LiDAR along with the 2015 Orthophotography program. The LiDAR will be .07 meter spacing and is expected to be received in February 2016.

Custodian: Land Information Office

Maintenance: Land Information Office

Standards

LiDAR Derivatives

Layer Status

- Along with the LiDAR LAS Files, Ozaukee County will be receiving a DEM and Contour line files.

Custodian: Land Information Office

Maintenance: Land Information Office

Standards

Orthoimagery

Orthoimagery

Layer Status

- In April 2015 Ozaukee County Purchased LIDAR along with the 2015 Orthophotography program. The orthophotography will be acquired to support National Map Accuracy Standards for 1"=100' scale, 6" pixel resolution. and is expected to be received in January 2016.
- Ozaukee County participated in the SEWRPC 2015 orthophotography
- Give next year of planned flight that occurs after 2015 Ozaukee County plans to update orthophotography flights every 5 years at a minimum, utilizing the SEWRPC cost sharing program.

Custodian Land Information Office
Standards

Historic Orthoimagery

Layer Status

- Ozaukee County has multiple years of historical Orthophoto imagery: 1941, 1950, 1963, 1970, 1980, 1990, 1995, 2000, 2005 and 2007. Ozaukee County has made the historical imagery available on the County GIS Website.

Custodian Land Information Office
Maintenance Land Information Office
Standards

Address Points and Street Centerlines

Address Point Data

Layer Status

- The Land Information Office will continuously maintain point addresses based on imaged roadways and other available information to support emergency response applications, wireless 911 and routing applications.

Custodian Sheriff's Department
Maintenance Land Information Office
Standards

Building Footprints

Layer Status

Custodian
Maintenance
Standards

Address Ranges

Layer Status

- The County centerline file will maintain address ranges based on imaged roadways and other available information to support emergency response applications, wireless 911 and routing applications.

Custodian Sheriff's Department
Maintenance Land Information Office
Standards

Street Centerlines/MSAG

Layer Status

- The County plans to maintain the dataset. The County complies with the GIS geodatabase design as the standard for mapping centerlines. 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.

Custodian Sheriff's Department
Maintenance Land Information Office
Standards

Rights of Way

Layer Status

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

Custodian Land Information Office
Maintenance Land Information Office
Standards

Trails

Layer Status

- The County will continue to maintain bicycle, pedestrian, snowmobile, and other major named trails (Ozaukee Interurban Trail) layer in our geodatabase.

Custodian Planning and Parks Department
Maintenance Land Information Office
Standards

Land Use

Current Land Use

Layer Status

- The County utilizes a land use map developed by the SWERPC. The County is planning to establish a regular maintenance schedule of every 5 years; It was updated in 2007 as part of the Multi-jurisdictional Comprehensive Plan for Ozaukee County.

Custodian Planning and Parks Department
Maintenance Land Information Office
Standards

Future Land Use

Layer Status

- 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.

Custodian Planning and Parks Department
Maintenance Land Information Office
Standards

- s. 66.1001, Wis. Stats. Comprehensive Planning.

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

Zoning

Shoreland and Floodplain Zoning

Layer Status

- **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.
- **Wetlands** The County is responsible for regulating the wetland areas within a shoreland delineated area. Ozaukee County requires a wetland delineation be completed when landowners have an area of a potential wetland. Upon identification of a wetland, the County is responsible to update the mapping to reflect the updated delineation.
- **Floodplain** The County is responsible for regulating the floodplain areas. Ozaukee County requires a floodplain delineation be completed when landowners have an area of a potential floodplain. Upon identification of a amendment of a floodplain, the County is responsible to update the mapping to reflect the updated delineation.

Custodian Land and Water Management
Maintenance Ozaukee County Land Information Office
Standards

County Special Purpose Zoning

Layer Status

- **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.

Custodian Planning and Parks Department
Maintenance Land Information Office/SEWRPC
Standards

Municipal Zoning Information Maintained by the County

Layer Status

- Ozaukee County does not maintain any Municipal Zoning information

Administrative Boundaries

Civil Division Boundaries

Layer Status

- The County created an approximation of the civil boundaries and will be revising them as necessary

Custodian Land Information Office
Maintenance Land Information Office
Standards

County Boundaries

Layer Status

- The County created an approximation of the county boundaries and will be revising them as necessary

Custodian Land Information Office
Maintenance Land Information Office
Standards

School District

Layer Status

- 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.

Custodian Land Information Office
Maintenance Land Information Office
Standards

Election Boundaries

Layer Status

- 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.

Custodian County Clerk's Office
Maintenance Land Information Office
Standards

Utility Districts

Layer Status

- 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 agreements with We-Energies, American Transmission Company (ATC) and Milwaukee Metropolitan Sewage District (MMSD) for data sharing.

Custodian Land Information Office
Maintenance Land Information Office
Standards

Emergency Service Area

Layer Status

- 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.

Custodian Sheriff's Department
Maintenance Land Information Office
Standards

Lake Districts

Layer Status

- The County has no lake districts

Native American Lands

Layer Status

- There are no parcels identified as Native American Lands within the County

Agency Administrative Districts and Zip Codes

Layer Status

- Our GIS has an approximate zip code layer. The Planning and Parks Department also has a zip code database.

Custodian **Planning and Parks/Land Information Office**
Maintenance **Land Information Office**
Standards

Public Administered Lands

Layer Status

- 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.
- Also, the County maintains a public and open space dataset.

Custodian **Planning and Parks/Land Information Office**
Maintenance **Land Information Office**
Standards

Other Layers

Hydrography Maintained by County or Value-Added

Layer Status

- Hydrography dataset includes all the waterlines, shorelines, marsh boundary lines and are updated by Southeast Wisconsin Regional Planning Commission. The orthophotography projects have been used to update the hydrography dataset on approximately 5 year intervals. The next update should be completed within the next three years by utilizing the 2015 Orthophotography.

Custodian **Planning and Parks/Land Information Office**
Maintenance **Southeast Wisconsin Regional Planning Commission**
Standards

Cell Phone Towers

Layer Status

- Cell tower location is a vital component to reverse 911 and the IPAWS (Integrated Public Alert & Warning System) for wireless alerts. Ozaukee Co Sheriff & Emergency Management currently has this capability and approval from Wisconsin Emergency management and FEMA to issue alerts and warnings via the cellular towers that cover Ozaukee Co,

Custodian **Ozaukee Co Sheriff & Emergency Management**
Maintenance **Ozaukee Co Sheriff & Emergency Management**
Standards

4 LAND INFORMATION SYSTEM

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

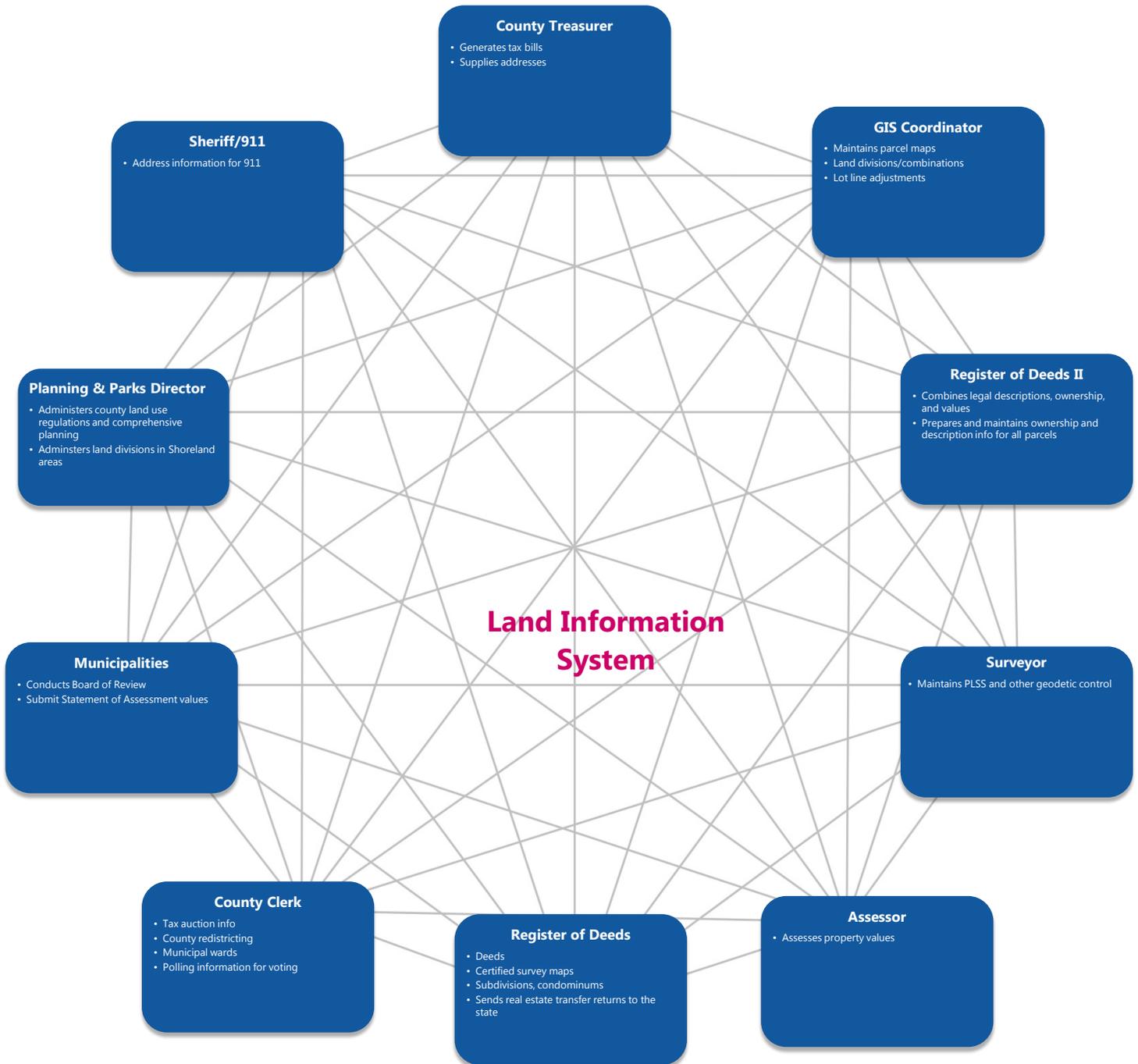


Figure 1. Ozaukee County Land Information System

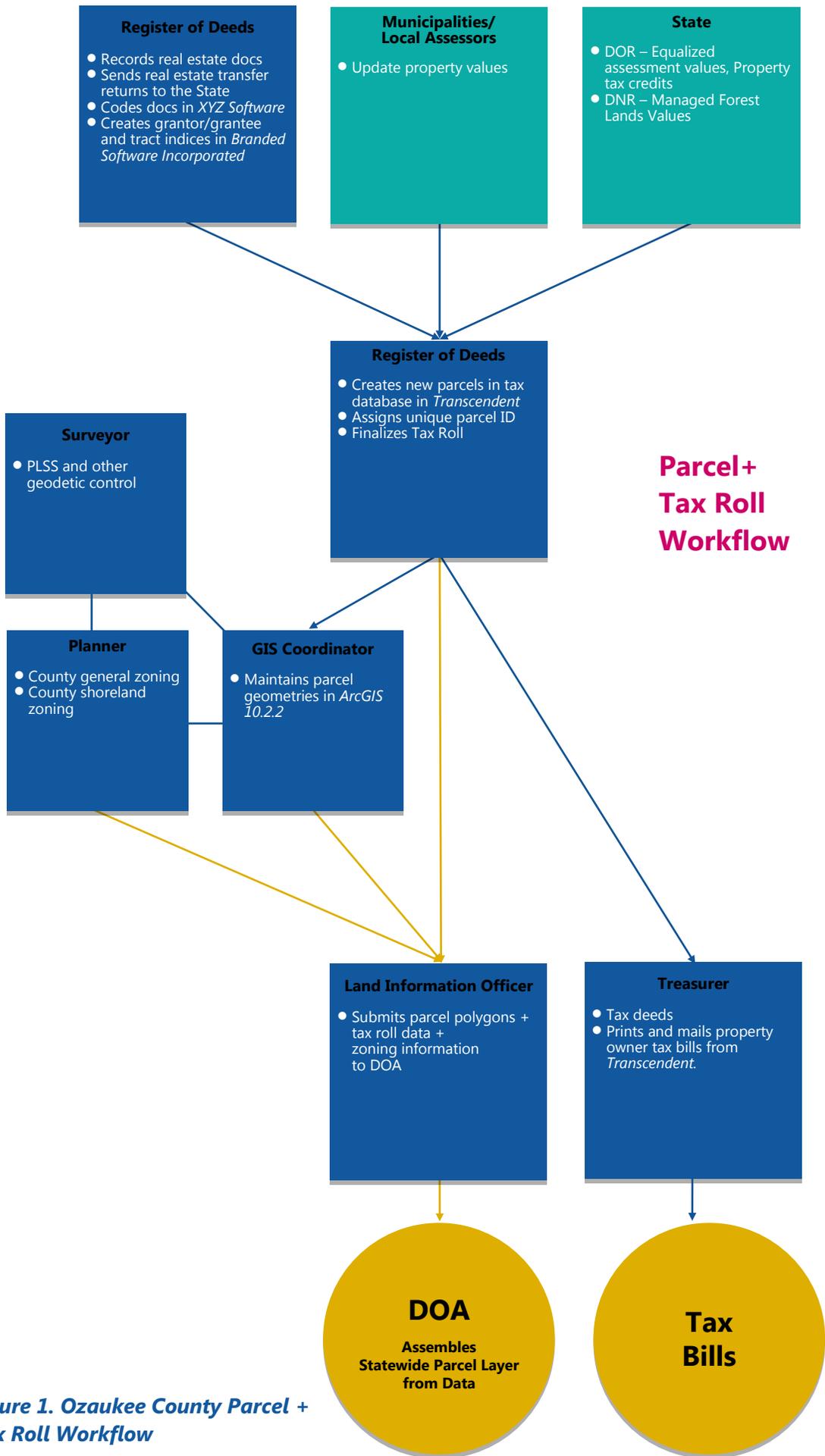


Figure 1. Ozaukee County Parcel + Tax Roll Workflow

Technology Architecture & Database Design

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

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

Costs associated with ongoing technology expenditures or projected expenditures can optionally be listed in Chapter 2. As a reminder, the annual "County Retained Fee/Grant Report" due to DOA at the end of the state fiscal year provides detailed information on expenditures.

Metadata and Data Dictionary Practices

The County plans to continue maintaining the Metadata for our already created GIS layers and create Metadata for newly created layers and data sets. The County utilizes ArcCatalog to develop and provide access to geospatial metadata. The software generates metadata consistent with the FGDC Content Standard for Digital Geospatial Metadata

Municipal Data Integration Process

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

Public Access and Website Information

Type of Website	Software or App	3 rd Party or Contractor	URL	Update Frequency/Cycle
GIS web mapping site	<i>ArcGIS Server</i>	<i>Ruekert-Mielke</i>	https://ozaukeeco.ags.ruekert-mielke.com/	Weekly
ROD land records search tools	<i>Vendor and software/app name</i>	<i>Fidlar</i>	https://tapestry.fidlar.com/Tapestry2/LinkToTapestry.aspx?County=Ozaukee&State=WI	Daily
RPL or tax parcel site	<i>Ascent</i>	<i>Transcendent</i>	http://www.ascent.co.ozaukee.wi.us/LandRecords/PropertyListing/RealEstateTaxParcel#/Search	Daily
Other				

Data Sharing

Data Availability to Public

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.

Data Sharing Restrictions

Ozaukee County established a Product Distribution Policy which states the data provided by the County cannot be manipulated, distributed or resold without the written permission of the Land Information Office. This form is distributed with each product request. The Ozaukee County GIS website does not allow download of the spatial or tabular data. Product requests must be submitted to the Land Information Office.

Government-to-Government Data Sharing

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..

Training and Education

Ozaukee County is dedicated to the continuation of Land Information and public access and realizes the importance of education and training to keep up with changes in hardware, software and technology. Ozaukee County utilizes the \$1000 Training grant towards attendance of the GIS Coordinator, GIS Technician, GIS interns or any other interested County personnel to the Wisconsin Land Information Association Annual Conference as well as regional conferences. Ozaukee County also allows staff to attend the ESRI User's Conference in San Diego to take advantage of the training on current software and insight into new technology on the horizon.