

# Ashland County

# Land Information Plan

2019-2021

\*\*Wisconsin Land Information Program  
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# EXECUTIVE SUMMARY

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**About this Document.** This document is a land information plan for Ashland County prepared by the land information officer (LIO) and the Ashland County land information council. Under state statute 59.72(3)(b), a “**countywide plan for land records modernization**” is required for participation in the Wisconsin Land Information Program (WLIP) The Ashland County Board originally approved a land information plan in October of 2005 and the county has maintained this document since. The purpose of this document is twofold: 1) to meet WLIP funding eligibility requirements necessary for receiving grants and retaining fees for land information, and 2) to plan for county land records modernization in order to improve the efficiency of government and provide improved government services to businesses and county residents.

**WLIP Background.** The WLIP, administered by the Wisconsin Department of Administration, is funded by document recording fees collected by register of deeds at the county-level. In 2018, Ashland County was awarded \$127,520 in the WLIP grants and retained a total of \$24,048 in local register of deeds document recording fees for land information.

This plan lays out how funds from WLIP 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 as a planning tool to guide implementation of land information activities of the county.

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

**Mission of the Land Information Office.** Over the next three years, Ashland County’s Land Information Office will provide geospatial data for the county’s planning processes, inform future land use decision making, partner with county departments to integrate land records, and improve public access to land records online.

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

## Ashland County Land Information Projects: 2019-2021

Project #1	Project Plan to Maintain Searchable Format (Benchmarks 1 & 2)
Project #2	Project Plan for PLSS (Benchmark 4)
Project #3	Update Orthoimagery with WROC in 2020
Project #4	Create and Publish Open Data Site
Project #5	PLSS Quality Assurance and Quality Control
Project #6	Arc Enterprise implementation
Project #7	Host an interactive parcel map website

The remainder of this document provides more details on Ashland County and the WLIP, summarizes current and future land information projects, and reviews the county’s status in completion and maintenance of the 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
- Coordinate the sharing of parcel/tax roll data with the Department of Administration in a searchable format determined by DOA under s. 59.72(2)(a)

## 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 59.72(1)(a)

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, known as Act 20. It directed the Department of Administration (DOA) to create a statewide digital parcel map in coordination with counties.

Act 20 also provided more revenue for WLIP grants, specifically for the improvement of local parcel datasets. The WLIP is dedicated to helping counties meet the goals of Act 20 and has made funding available to counties in the form of Strategic Initiative grants to be prioritized for the purposes of parcel/tax roll dataset improvement.

For Strategic Initiative grant eligibility, counties are 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—were determined through a participatory planning process. Current benchmarks are detailed in the WLIP grant application, as will be future benchmarks.

### WLIP Benchmarks (For 2016-2018 Grant Years)

- Benchmark 1 & 2 – Parcel and Zoning Data Submission/Extended Parcel Attribute Set Submission
- Benchmark 3 – Completion of County Parcel Fabric
- Benchmark 4 – Completion and Integration of PLSS

More information on how Ashland County is meeting these benchmarks appears in the Foundational Elements section of this plan document.

## County Land Information System History and Context

Ashland County has been involved in land records modernization since the late 1980s when digital information systems started to become a part of normal operations. At first, a database system was deployed for taxation purposes and later parcel mapping started taking place using AutoCAD software.

In 2000, digital document scanning was implemented in the register of deeds office focusing on current recorded documents with back scanning for previous years commencing shortly thereafter. It was not until about 2000 that the county embraced GIS as its main parcel management software. At that time, the parcel mapping was converted from CAD's software to ESRI's GIS software and referenced to the county coordinate system. In 2002, the county surveyor purchased a survey-grade GPS unit to obtain high accuracy coordinates of PLSS corners, and it is estimated that about 50% of the county has now been remonumented.

The county went live with its web mapping application in 2004 publishing the county's parcel mapping to the public and providing end users the ability to explore the data in an interactive online application. In 2010, the county completed mapping all of the county parcels and has since been maintaining and refining them to increase their accuracy.

In 2014, the county completed scanning most recorded land records and have back indexed them to approximately 60 years. The county, with a consultant's assistance, moved from tax parcel line features to ESRI's parcel fabric polygon features to encompass a more accurate tax parcel mapping system. In 2017, the parcel fabric transition was completed. Recently, in mid-2018, the county hired a fulltime GIS Coordinator to build and maintain the GIS Department. This position is tasked with assisting all Ashland County Departments, other organizations, and the public and private sector with GIS and land records needs. The Land Information Council and County Board passed a resolution naming the GIS Coordinator the new Land Information Officer, shifting the associated duties from the Register of Deeds.

Throughout the years, the county has been able to purchase several sets of countywide digital aerial imagery and has had the capability to scan wide format maps and plats for integration into its GIS. With the help of past WLIP funds, the county has made great improvements to modernizing its digital land information. This land records modernization has proven to provide many benefits to the public by making the county land records more accessible and will continue modernization by developing our online availability.

## County Land Information Plan Process

County land information plans were initially updated every five years. However, as a result of Act 20, counties must update and submit their plans to DOA for approval every three years. The 2019-2021 plan, completed at the end of 2018, is the second post-Act 20 required update.

### Plan Participants and Contact Information

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

According to s. 59.72(3m), Wis. Stats., the county land information council is to include:

- Register of Deeds
- Treasurer
- Real Property Lister or designee
- Member of the county board
- Representative of the land information office

- A realtor or member of the Realtors Association employed within the county
- A public safety or emergency communications representative employed within the county
- County surveyor or a registered professional land surveyor employed within the county
- Other members of the board or public that the board designates

The land information council must have a role in the development of the county land information plan, and DOA requires county land information councils to approve final plans.

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

<b>Ashland County Land Information Council and Plan Workgroup</b>				
<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Email</b>	<b>Phone</b>
<b>+* Karen Miller</b>	Register of Deeds	Ashland County Register of Deeds Office	karen.miller@co.ashland.wi.us	715-682-7008
<b>+* Tracy Hoglund</b>	County Treasurer	Ashland County Treasurer's Office	tracy.hoglund@co.ashland.wi.us	715-682-7012
<b>+* Jennifer Solberg</b>	Real Property Lister	Ashland County Land Description Department	jennifer.solberg@co.ashland.wi.us	715-682-7003
<b>+* Donna Williamson</b>	County Board Member	Ashland County Board	na	715-682-6710
<b>+* Brittany Goudos-Weisbecker</b>	GIS Coordinator, Land Information Officer	Ashland County GIS Department	brittany.goudos-weisbecker@co.ashland.wi.us	715-685-2002
<b>+* Jessica Stricker</b>	Real Estate Broker	By The Bay Realty & Auction	jstricker54546@gmail.com	715-413-1354
<b>+* Dorothy Tank</b>	Director of Emergency Management	Ashland County Sheriff's Department	dorothy.tank@ashlandcountysheriff.us	715-685-7640
<b>+* Patrick McKuen</b>	Professional Land Surveyor/County Surveyor	Pine Ridge Land Surveying, LLC./Ashland County Surveying Department	pmckuen@pineridgesurveying.com	715-682-7044
<b>+ Joshua Rowley</b>	Zoning Administrator	Ashland County Zoning Department	joshua.rowley@co.ashland.wi.us	715-682-7014
<b>+ Matt Eitrem</b>	GIS Coordinator	City of Ashland Engineering Department	meitrem@coawi.org	715-682-7057
<b>+ Matt Schultz</b>	Assistant Ashland County Forester	Ashland County Forestry and Recreation Department	ashlandcountyforest@outlook.com	715-769-3777
<b>+ Rachel Lipka</b>	IT Administrator	Ashland County IT Department	rlipka@hsd.co.ashland.wi.us	715-682-7004
<b>Julie Gleeson</b>	Deputy Register of Deeds	Ashland County Register of Deeds Office	julie.gleeson@co.ashland.wi.us	715-682-7008

+ Land Information Council Members

\* Required to be on the council by state statute

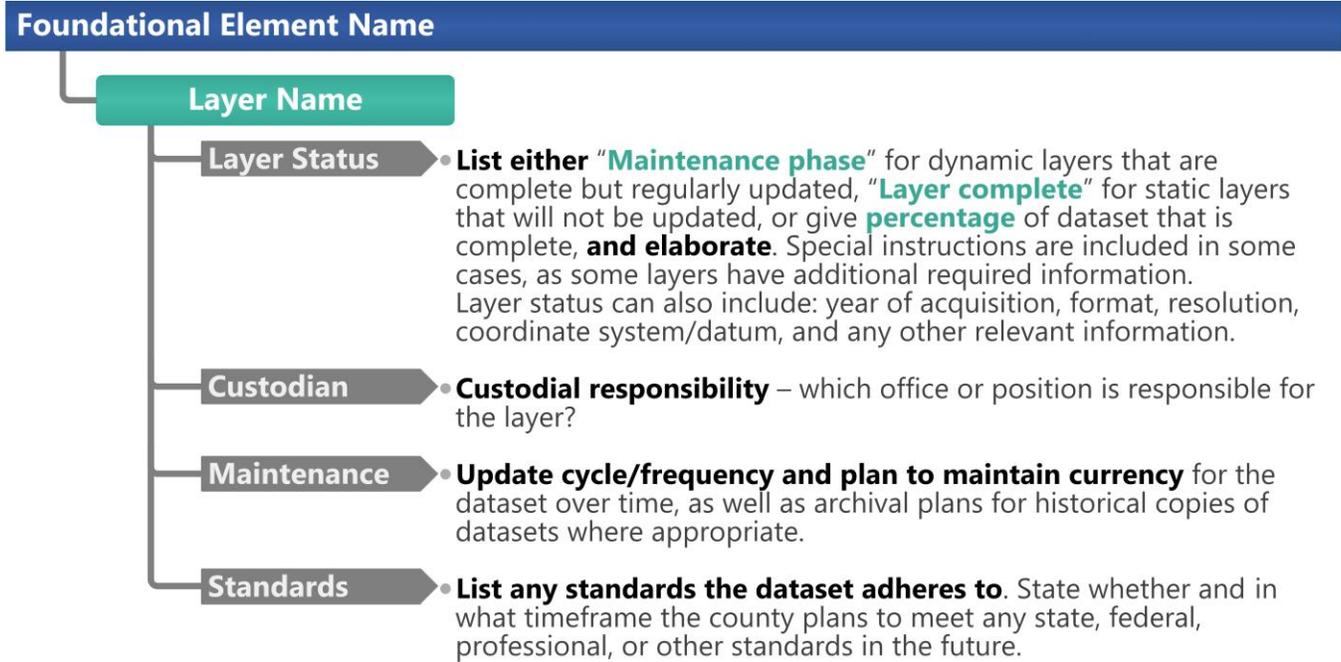
# 2 FOUNDATIONAL ELEMENTS

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

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

## FOUNDATIONAL ELEMENTS

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



# PLSS

## Public Land Survey System Monuments

### Layer Status

#### PLSS Layer Status

	Status/Comments
Number of PLSS corners (selection, ¼, meander) <b>set in original government survey</b> that can be remonumented in your county	● 3230*
Number and percent of PLSS corners capable of being remonumented in your county that <b>have been remonumented</b>	● 1700±/53%*
Number and percent of remonumented PLSS corners with survey grade coordinates (see below for definition) <ul style="list-style-type: none"> <li>● <b>SURVEY GRADE</b> – coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision</li> <li>● <b>SUB-METER</b> – point precision of 1 meter or better</li> <li>● <b>APPROXIMATE</b> – point precision within 5 meters or coordinates derived from public records or other relevant information</li> </ul>	● 1607/50%*
Number and percent of survey grade PLSS corners integrated into county digital parcel layer	● 3943
Number and percent of non-survey grade PLSS corners integrated into county digital parcel layer	● 0
Tie sheets available online?	● Yes- <a href="https://landshark.co.ashland.wi.us/LandShark/login">https://landshark.co.ashland.wi.us/LandShark/login</a>
Percentage of remonumented PLSS corners that have <b>tie sheets available online</b> (whether or not they have corresponding coordinate values)	● 52%*
Percentage of remonumented PLSS corners that have tie sheets available online (whether or not they have corresponding coordinate values) <b>and a corresponding URL path/hyperlink value</b> in the PLSS geodatabase	● 0
PLSS corners believed to be remonumented based on filed tie-sheets or surveys, but do not have coordinate values	● 100±*
Approximate number of PLSS corners believed to be lost or obliterated	● Unknown
Which system(s) for <b>corner point identification/ numbering</b> does the county employ (e.g., the Romportl point numbering system known as Wisconsin Corner Point Identification System, the BLM Point ID Standard, or other corner point ID system)?	<ul style="list-style-type: none"> <li>● Other/unique- First numbering system created uses auto-populated object identification numbers.</li> <li>● Other/unique- newly entered in tie sheet data has direction, quarter/quarter-quarter corner followed by section, township, range. Ex. W1/4 Cor S30T47NR4W</li> <li>● We will be moving forward with the Romportl point numbering system known as Wisconsin Corner Point Identification System</li> </ul>
Does the county contain any <b>non-PLSS areas</b> (e.g., river frontage long lots, French land claims, private claims, farm lots, French long lots, etc.) or any special situations regarding PLSS data for tribal lands?	● No
Total number of PLSS corners along each bordering county	● 270*
Number and percent of PLSS corners remonumented along each county boundary	● 150/56%*
Number and percent of remonumented PLSS corners along each county boundary with survey grade coordinates	● 127/47%*
In what ways does your county collaborate with or plan to collaborate with neighboring counties for PLSS updates on shared county borders?	● Ashland County is to collaborating with neighboring counties when obtaining PLSS updates on shared county borders.

\* Data is from the 2015 Ashland County Land Information Plan, we are currently working on updating these values.

### Custodian

- The custodian of the PLSS corner tie sheets, by statute, is the county surveyor. Ashland County did not have a full-time County Surveyor for many years and now again does not; therefore, the

tie sheets were filed, and continue to be filed, in the Register of Deeds Office with hard copies on file in the county surveyor's office. The Register of Deeds Office also indexes and scans the documents and uploads them to their document search website to allow online access.

- The custodian of the GIS layer is the Ashland County GIS Coordinator and the Real Property Lister.

### Maintenance

- The county purchased a Trimble R6-4 RTK GPS Receiver and TSC3 Data Collector hardware and field software, capable of repeatable one (1) centimeter or better precision. This unit enables the county to use the Wisconsin County Reference System (WISCRS) and the Height Modernization Program Corners Network in conjunction with s. 236.18(2) toward achieving the ultimate goal of obtaining survey grade precision on all PLSS corners in the county.
- Tie sheets are updated as professional surveyor's record documents with Ashland County Register of Deeds. They are also updated as needed to complete pertinent boundary surveys or section breakdowns.
- Layer is updated as new tie sheets are recorded throughout the year.

### Standards

- Statutory Standards for PLSS Corner Remonumentation
  - s. 59.74, Wis. Stats. Perpetuation of section corners, landmarks.
  - s. 60.84, Wis. Stats. Monuments.
  - ch. A-E 7.08, Wis. Admin. Code, U.S. public land survey monument record.
  - ch. A-E 7.06, Wis. Admin. Code, Measurements.
  - s. 236.15, Wis. Stats. Surveying requirement.
- Ashland County meets the survey grade standard.
  - SURVEY GRADE standard from Wisconsin County Surveyor's Association:
    - **SURVEY GRADE** – coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision
    - **SUB-METER** – point precision of 1 meter or better
    - **APPROXIMATE** – point precision within 5 meters or coordinates derived from public records or other relevant information

## Other Geodetic Control and Control Networks

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

### Layer Status

- Ashland County currently has 29 HARN monuments, six of which are accurate to 1 part per million (ppm). The HARN effort was part of a five-county project made possible by a grant administered by the former Wisconsin Land Information Board and was completed May 1998. Since January 2002, Ashland County has based its horizontal and vertical GPS control to the HARN monument network. A Trimble 5700 RTK GPS Receiver, capable of repeatable one centimeter or better precision, was purchased at that time. Coordinate information obtained from the National Geodetic Reference System (NGRS) database meets National Geodetic Survey (NGS) specification data sheets as they are revised. This has kept our county up-to-date using the Wisconsin County Coordinate System (WCCS) for Ashland County, which is in conjunction with a coordinate system allowed by Wisconsin State Statute 236.18(2). This coordinate system is a survey grade standard set forth by the Wisconsin County Surveyors Association (WCSA).

### Custodian

- The County Surveyor is the custodian of the HARN monuments.

### Maintenance

- There are no plans for further densification.

### Standards

- This effort adhered to the WLIB Specifications and Guidelines to Support Densification of the Wisconsin HARN using GPS technology that was available at that time.

# Parcel Mapping

## Parcel Geometries

### Layer Status

- **Progress toward completion/maintenance phase:** In Ashland County, 100% of the county's parcels are available in a commonly-used digital GIS format.
- **Projection and coordinate system:** North American Datum 1983 (HARN), Wisconsin County Reference System (WSCRS), Ashland County, Feet.
- **Integration of tax data with parcel polygons:** The county does have a parcel polygon model that directly integrates tax/assessment data as parcel attributes.
- **Esri Parcel Fabric/LGIM Data Model:** The county does use the Esri Parcel Fabric Data Model. Ashland County completed the transfer of the parcel layer into the Esri Parcel Fabric in 2017.
- **Online Parcel Viewer Software/App and Vendor name:**
  - **WebGUIDE Xtreme (WGX)** – from contractor/vendor Applied Data Consultants.
- **Unique URL path for each parcel record:** No, the county does not have **unique URL paths** for each parcel record, from which one can view the **specific** parcel's attribute information and other land records.

### Custodian

- The Real Property Lister and the GIS Coordinator.

### Maintenance

- **Update Frequency/Cycle.** Parcel polygons are updated bimonthly.
- The parcel maps are maintained by the Real Property Lister and the GIS Coordinator. As remonumentation of PLSS corners progress and geodetic control is obtained, the maps will be refined to create a more accurate parcel fabric. Where geodetic control is nonexistent, the parcel mapping is referenced to a variety of sources, including recorded legal descriptions.

### Standards

- **Data Dictionary:** After the transition into the parcel fabric, Ashland County no longer has a data dictionary for the parcel layer. There are no plans to create one.
- No statutory standards.

## Assessment/Tax Roll Data

### Layer Status

- **Progress toward completion/maintenance phase:** NA (This is not applicable, since assessment/tax roll data is not a GIS data layer and is updated throughout the year.)
- **Tax Roll Software/App and Vendor name:**
  - **Treasurer's Collections and Property Assessment & Taxation** – from contractor/vendor GCS Software.
- **Municipal Notes:** NA

### Custodian

- The Ashland County Treasurer is the custodian of the tax roll data. The Real Property Lister is the custodian of the assessment data.

### Maintenance

- **Maintenance of the Searchable Format standard:** To maintain the Searchable Format standard, Ashland County has integrated property and ownership records with the digital parcel maps by linking data through the PIN field. The County Treasurer maintains the tax rolls. The Real Property Lister maintains the assessment rolls. The Real Property Lister and the GIS Coordinator maintain the parcel fabric. The GIS Coordinator provides the updated parcel layer to WGX for it to be updated on the county's interactive web map on a weekly basis. Work needs to be done to make our data standardized with the state submission request.
- **Searchable Format Workflow:** The county maintains parcel/tax roll data in such a way that **requires significant formatting every year**— now completed by the GIS Coordinator, in-house.

## Standards

- Wisconsin Department of Revenue Property Assessment Manual and attendant DOR standards.
- DOR XML format standard requested by DOR for assessment/tax roll data.

## Non-Assessment/Tax Information Tied to Parcels

e.g., Permits, Easements, Non-Metallic Mining, Brownfields, Restrictive Covenants

### Layer Status

- The Ashland County Zoning office uses GCS Software's Permit Tracking program to monitor building permits (including accessory buildings, alterations/additions, change of use, commercial buildings, gazebos), land uses, sanitary systems (including reconnects, transfers, holding tank systems, septic systems, mound systems, privies and portable restroom units).
- Currently, this data is not tied to GIS.

### Custodian

- The county zoning administrator is the custodian of permit data.

### Maintenance

- The zoning administrator's office maintains permit data by attaching it to real estate parcels using their Permit Tracking program. This data is currently only available in the zoning office, but may be incorporated into the county's GIS in the future.

### Standards

- There are no statutory standards pertaining to the tracking of permits by tying them to parcels.

## ROD Real Estate Document Indexing and Imaging

### Layer Status

- **Grantor/Grantee Index:** The register of deeds office currently uses TriMin Systems' LandLink software for entering and indexing real estate documents. Documents are indexed by grantors and grantees, as well as date and time of recording, type of instrument, fees paid, who the document was returned to after recording, legal description and related documents. All indexing is verified prior to becoming available to the public.
- **Tract Index:** Real estate documents are indexed in a PLSS-based tract index. The parcel identification number is also included in the indexing and is required on all conveyance documents by county ordinance. All recorded documents that contain a legal description are indexed by quarter-quarter or government lot, section, township, and range; subdivision name, lot, and block; or certified survey map and lot number.
- **Imaging:** Documents are scanned using the Simple Software program and the images are related to the records in LandLink by document number.
- **Electronic Recording:** Real estate documents are accepted for recording electronically through trusted submitters using TriMin's Lighthouse program. Documents are reviewed and either accepted or rejected, allowing submitters to either retrieve the recorded document or correct the document in a more timely manner than if documents were returned by mail.
- **Online Access.** The real estate document index is available for searching at no fee on our LandShark website at <https://landshark.co.ashland.wi.us/LandShark>. Images may be purchased at the statutory fee using a credit card. The payment process is handled by Authorize.Net and a small convenience fee is charged to the customer to cover the costs. Customers may also purchase images through LandShark by establishing an escrow account, thereby avoiding the credit card convenience fee. Access is also available by monthly subscription, payable in advance.
- **ROD Software/App and Vendor Name:**
  - **LandShark** – from contractor/vendor TriMin Systems.
  - **LandLink**– from contractor/vendor TriMin Systems.

### Custodian

- County Register of Deeds.

## Maintenance

- The LandLink, LandShark, and Lighthouse programs are maintained by TriMin Systems. The indexes and images are hosted by a third-party service provider engaged by TriMin. The hosting service uses a dedicated server and provides back-ups of the daily data, which are retained for a period of ten days. TriMin is provided monthly server snapshots of all data uploaded on the server.

## 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

- **Most recent acquisition year:** 2015
- **Vertical Accuracy:** 12.5 cm RMSEz or a fundamental vertical accuracy (FVA) of 24.5 cm at 95% confidence level
- **Nominal Point Spacing:** 1-meter
- **Nominal Point Density:** 1 point per square meter
- **Contractor's standard, etc.:** The project was produced to meet FEMA and USGS LiDAR base spec v1.0 vertical accuracy specifications of the time, stated above.
- LiDAR data for Ashland County was received from FEMA. The county hired Ayres Associates to perform additional processing services of the data. The data was reprojected and the LiDAR point cloud was derived to North American Datum 1983 (HARN), Wisconsin County Reference System (WSCRs), Ashland County, Feet; and vertically geo-referenced to the North American Vertical Datum 1988.
- **Next planned acquisition year:** NA

### Custodian

- GIS Coordinator.

### Maintenance

- No current plan to maintain.

### Standards

- No statutory standards.

## LiDAR Derivatives

e.g., **Bare-Earth Digital Terrain Model (DTM), Bare-Earth Elevation Contours, Bare-Earth Digital Elevation Model (DEM), Digital Surface Model (DSM), etc.**

## 2-Foot Contours

### Layer Status

- Layer completed by Ayres Associates.

### Custodian

- GIS Coordinator.

### Maintenance

- No current plan to maintain.

### Standards

- No statutory standards.

## Hydro Breaklines

### Layer Status

- Layer completed by Ayres Associates.

### Custodian

- GIS Coordinator.

### Maintenance

- No current plan to maintain.

### Standards

- No statutory standards.

## Buildings and Vegetation Classification

### Layer Status

- Layer completed by Ayres Associates.

### Custodian

- GIS Coordinator.

### Maintenance

- No current plan to maintain.

### Standards

- No statutory standards.

## Digital Elevation Model (DEM)

### Layer Status

- Layer completed by Ayres Associates.

### Custodian

- GIS Coordinator.

### Maintenance

- No current plan to maintain.

### Standards

- No statutory standards.

## Digital Surface Model (DSM)

### Layer Status

- Layer completed by Ayres Associates.

### Custodian

- GIS Coordinator.

### Maintenance

- No current plan to maintain.

### Standards

- No statutory standards.

## Other Types of Elevation Data

### Layer Status

- Ashland County does not have other types of elevation data.

# Orthoimagery

## Orthoimagery

### Layer Status

- **Most recent acquisition year:** 2015
- **Resolution:** 6 inch
- **Contractor's standard:** ASPRS Class II
- Ashland County is currently using orthoimagery obtained through participation in WROC 2015. Ayres Associates obtained digital aerial imagery in April 2015, suitable for the production of 4-band (RGBN) orthoimagery at 6-inch ground pixel resolution. Control was collected for the project using Inertial Measurement Unit (IMU), Airborne Global Positioning System (ABGPS), and ground-based GPS technology.
- **Next planned acquisition year:** 2020
- **WROC participation in 2020:** Confirmed participation in WROC 2020

### Custodian

- GIS Coordinator.

### Maintenance

- The county plans to update its orthoimagery every 3-5 years, dependent on the timing of the next consortium and availability of funding.

### Standards

- No statutory standards.

## Historic Orthoimagery

### 2010 Digital Orthoimagery

#### Layer Status

- Layer completed.
- Color orthophotography at a 12-inch ground pixel resolution.

#### Custodian

- GIS Coordinator.

#### Maintenance

- No current plan to maintain.

#### Standards

- No statutory standards.

### 2008 NAIP COLOR ORTHOPHOTOS

#### Layer Status

- Layer completed.

#### Custodian

- U.S. Department of Agriculture is the custodian.

#### Maintenance

- No current plan to maintain.

#### Standards

- No statutory standards.

### 2005 DIGITAL ORTHOIMAGERY

#### Layer Status

- Layer completed.

### **Custodian**

- GIS Coordinator.

### **Maintenance**

- No current plan to maintain.

### **Standards**

- No statutory standards.

## **Other Types of Imagery**

**e.g., Oblique Imagery, Satellite Imagery, Infra-red, etc.**

### **Layer Status**

- Ashland County does not have other types of imagery.

## **Address Points and Street Centerlines**

### **Address Point Data**

#### **Layer Status**

- The Ashland County Office of Emergency Management collects and assigns addressing data, which is maintained using ESRI's GeoLynx DMS software. This layer is complete and in validation phase. It is the county's goal to integrate the 911 addressing data with the parcel map. This project is now being started by the GIS Coordinator.
- Director of Emergency Management and GIS Coordinator are collaborating to create an address point GIS layer for the public and the parcel map. This layer is 0% complete.

#### **Custodian**

- Director of Emergency Management is the custodian of the emergency management address layer.
- GIS Coordinator will be custodian of the public address point layer.

#### **Maintenance**

- Address point data is maintained on a regular basis as new addresses are assigned or changed.

#### **Standards**

- No statutory standards.
- The Office of Emergency Management is drafting an addressing ordinance to establish Ashland County's addressing policies and procedures which acknowledge the existing or developing ordinances of the county's municipalities.

## **Building Footprints**

#### **Layer Status**

- Layer completed by Ayres Associates.

#### **Custodian**

- GIS Coordinator.

#### **Maintenance**

- No current maintenance cycle determined.

#### **Standards**

- No statutory standards.

## **Other Types of Address Information**

**e.g., Address Ranges**

#### **Layer Status**

- Ashland County created the address ranges when the countywide address system was developed.

- Several municipalities in Ashland County have their own separate addressing system, including the City of Ashland, City of Mellen, Village of Butternut, the Sanitary District of Glidden-Town of Jacobs, and the Town of La Pointe. Because Ashland County Dispatch is the Public Safety Answering Point (PSAP) for these municipalities, the Office of Emergency Management has their address point data but does not maintain their address systems. The Office of Emergency Management assists the Sanitary District of Glidden-Town of Jacobs and the Town of La Pointe with their address system.
- Emergency Management has a completed address layer that is a part of their road centerlines layer. A long-term goal would be to integrate this information with the GIS Coordinator's data.

#### **Custodian**

- Director of Emergency Management.

#### **Maintenance**

- Updated as needed.

#### **Standards**

- No statutory standards.
- The Office of Emergency Management is drafting an addressing ordinance to establish Ashland County's addressing policies and procedures which acknowledge the existing or developing ordinances of the county's municipalities.

## **Street Centerlines**

#### **Layer Status**

- Ashland County's parcel maps include centerlines of all named public and private roads within the county, with road names included as an attribute.
- Layer is complete but needs to be updated with official 911 names from the Director of Emergency Management's database.

#### **Custodian**

- GIS Coordinator.

#### **Maintenance**

- Once layer is up-to-date maintenance will include adding street centerlines of newly created roads and keeping up with adjustments as necessary.

#### **Standards**

- No statutory standards.

## **Rights of Way**

#### **Layer Status**

- Layer is 75% complete.

#### **Custodian**

- GIS Coordinator.

#### **Maintenance**

- Updated as needed.

#### **Standards**

- No statutory standards.

## **Trails**

### **e.g., Recreational Trails**

#### **Layer Status**

- Ashland County maintains two data sets regarding recreational trails; the GIS Coordinator's trail dataset and the Forestry and Recreation Department's trail dataset.

- The Forestry and Recreation Department’s trail datasets are complete.
- The GIS Coordinator’s trail dataset is 25% complete.

#### **Custodian**

- Forestry department is custodian of the countywide Snowmobile Trails and County Forest Hunter Walking Trails.
- GIS Coordinator is custodian of the layer of other recreation trails around the county.

#### **Maintenance**

- Forestry Department’s trail datasets are maintained on an annual as-needed basis. It is not maintained for historical reference.
- GIS Coordinator’s trail dataset has no current maintenance cycle determined.

#### **Standards**

- No statutory standards.

## **Land Use**

### **Current Land Use**

#### **Layer Status**

- Layer was completed in 2016 when the county comprehensive plan was updated in 2016. It has not been updated since.

#### **Custodian**

- GIS Coordinator.

#### **Maintenance**

- Ashland County does not maintain current land use data. Now that we have a GIS Coordinator, maintenance cycle needs to be determined.

#### **Standards**

- No statutory standards.

### **Future Land Use**

#### **Layer Status**

- Layer is complete.
- Future land use layers and maps were created through the county’s comprehensive planning process in 2016.

#### **Custodian**

- GIS Coordinator.

#### **Maintenance**

- No current maintenance cycle determined.

#### **Standards**

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

## **Zoning**

### **County General Zoning**

#### **Layer Status**

- The County does maintain a GIS representation of county general zoning boundaries.
- Layer is complete.
- Ashland County has two general zoning districts; Forestry and Recreation, and Unrestricted.
- Some municipalities in Ashland County maintain their own zoning districts and GIS layers.

### Custodian

- The Zoning Administrator is the custodian of the records.
- The GIS Coordinator is the custodian of the layer.

### Maintenance

- Updated as needed.

### Standards

- No statutory standards.

## Shoreland Zoning

### Layer Status

- The County does maintain a GIS representation of county shoreland zoning boundaries.
- Layer is complete.

### Custodian

- The Zoning Administrator is the custodian of the records.
- The GIS Coordinator is the custodian of the layer.

### Maintenance

- No current maintenance cycle determined.

### Standards

- No statutory standards.

## Farmland Preservation Zoning

### Layer Status

- Not administered by county.
- Ashland County does not administer a farmland preservation zoning ordinance. Ashland County Land and Water Conservation Department does administer a farmland preservation area in which lands can be entered into a Farmland Preservation Plan.
- **Year of certification:** NA

## Floodplain Zoning

### Layer Status

- The County does maintain a GIS representation of floodplain zoning boundaries.
- The County's floodplain zoning GIS data is the same as/identical to the [FEMA map](#).
- **Letters of Maps Change** – FEMA Flood Insurance Rate Maps (FIRMs) can be changed through "Letters of Maps Change," which is comprised of a few things: Letters of Map Amendment, Letters of Map Revision, and Letters of Map Revision Based on Fill. These are documents issued by FEMA that officially remove a property and/or structure from the floodplain. They are collectively called Letters of Map Change.
- Layer was completed by FEMA. Many issues persist with this layer not accurately representing floodplain areas in Ashland County.

### Custodian

- FEMA is the custodian of the data.

### Maintenance

- Ashland County will be receiving layer updates from FEMA within the year 2019.

### Standards

- No statutory standards.

## Airport Protection

### Layer Status

- Not administered by county.

## Municipal Zoning Information Maintained by the County

e.g., Town, City and Village, Shoreland, Floodplain, Airport Protection, Extra-Territorial, Temporary Zoning for Annexed Territory, and/or Zoning Pursuant to a Cooperative Plan

### Layer Status

- Ashland County does not have a municipal zoning layer.

## Administrative Boundaries

### Civil Division Boundaries

e.g., Towns, City, Villages, etc.

### Layer Status

- Layer is complete.

### Custodian

- GIS Coordinator.

### Maintenance

- Updated as needed.
- As the county acquires more accurate coordinates on the PLSS corners that are located on the boundary lines we will discuss updating this layer.

### Standards

- No statutory standards.

## School Districts

### Layer Status

- **Progress toward completion/maintenance phase:** 100%
- **Relation to parcels:** NA, layers are not tied together. Note that the parcel layer has a school district attribute, but the school district layer does not have parcel attribute.
  - **Attributes linked to parcels:** None

### Custodian

- GIS Coordinator.

### Maintenance

- No maintenance cycle determined.

### Standards

- No statutory standards.

## Election Boundaries

e.g., Voting Districts, Precincts, Wards, Polling Places, etc.

### Layer Status

- Layer Completed.

### Custodian

- GIS Coordinator.

### Maintenance

- Updated as needed.

### Standards

- No statutory standards.

## Utility Districts

e.g., Water, Sanitary, Electric, etc.

### Layer Status

- Ashland County does not have any utility districts layers.

## Public Safety

e.g., Fire/Police Districts, Emergency Service Districts, 911 Call Center Service Areas, Public Safety Answering Points, Healthcare Facilities

### Layer Status

- Layers are incomplete.
  - Fire/police districts 75% complete.
  - EMS district 75% complete.
  - Healthcare facilities 0% complete.

### Custodian

- GIS Coordinator.

### Maintenance

- Updated as needed.

### Standards

- No statutory standards.

## Lake Districts

### Layer Status

- Ashland County does not have lake districts.

## Native American Lands

### Layer Status

- Layer is complete.

### Custodian

- The Bad River Tribe's GIS Specialist.

### Maintenance

- The Bad River Tribe maintains the layer.

### Standards

- No statutory standards.

## Other Administrative Districts

e.g., County Forest Land, Parks/Open Space, etc.

### Layer Status

- These layers are being created by the GIS Coordinator now in 2018.
- 50% complete.

### Custodian

- GIS Coordinator

### Maintenance

- No current maintenance cycle determined.

### Standards

- No statutory standards.

## Other Layers

### Hydrography Maintained by County or Value-Added

e.g., Hydrography maintained separately from DNR or value-added, such as adjusted to orthos

#### Layer Status

- Completed by Ayres Associates from LiDAR.

#### Custodian

- GIS Coordinator

#### Maintenance

- No maintenance cycle.

#### Standards

- No statutory standards.

### Cell Phone Towers

#### Layer Status

- Ashland County maintains a database of cell tower locations throughout the county as each site is assigned a 911 address. The Ashland County Sheriff's Department utilizes cell tower locations to help narrow an incident location if a cell phone call location does not plot on the Dispatch map. The Zoning Department issues permits for cell phone towers, with the permits attached to the parcels through their Permit Tracking software.
- GIS Coordinator layer is 0% completed.

#### Custodian

- The custodians of the data are the Office of Emergency Management, the Sheriff's Department, and the Zoning Department.
- GIS Coordinator will be custodian of the layer, once it is created.

#### Maintenance

- No current maintenance cycle determined.

#### Standards

- No statutory standards.

### Bridges and Culverts

#### Layer Status

- Highway Department maintains a spreadsheet inventory for culverts on the county highway system. Highway Department has access to an inventory for all local bridges.
- Regional GIS professionals are working to build a database of all culverts in the Ashland and Bayfield County area.
- GIS Coordinator layer is 0% complete.

#### Custodian

- The Highway Department is the custodian for the culverts.
- The Wisconsin Department of Transportation maintains the bridge database.
- GIS Coordinator will be custodian of the layer, once it is created.

#### Maintenance

- No current maintenance cycle determined.

#### Standards

- No statutory standards.

## Other

e.g., Pipelines, Railroads, Non-Metallic Mining, Sinkholes, Manure Storage Facilities, etc.

### Layer Status

- Pipelines- Completed.
- Railroads- Completed.
- Non-Metallic Mining- 0%, incomplete.
- Sinkholes- 0%, incomplete.
- Manure Storage Facilities- 0%, incomplete.

### Custodian

- GIS Coordinator.

### Maintenance

- No current maintenance cycle determined.

### Standards

- No statutory standards.

## Conservation Easements

### Layer Status

- Layer is complete.

### Custodian

- GIS Coordinator and Real Property Lister.

### Maintenance

- Updated as parcels become recorded as conservation easements.

### Standards

- No statutory standards.

## Managed Forest Lands

### Layer Status

- Layer is complete.

### Custodian

- GIS Coordinator and Real Property Lister.

### Maintenance

- Updated as needed as parcels' managed forest land statuses are added, removed, or changed.

### Standards

- No statutory standards.

# 3 LAND INFORMATION SYSTEM

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

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

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

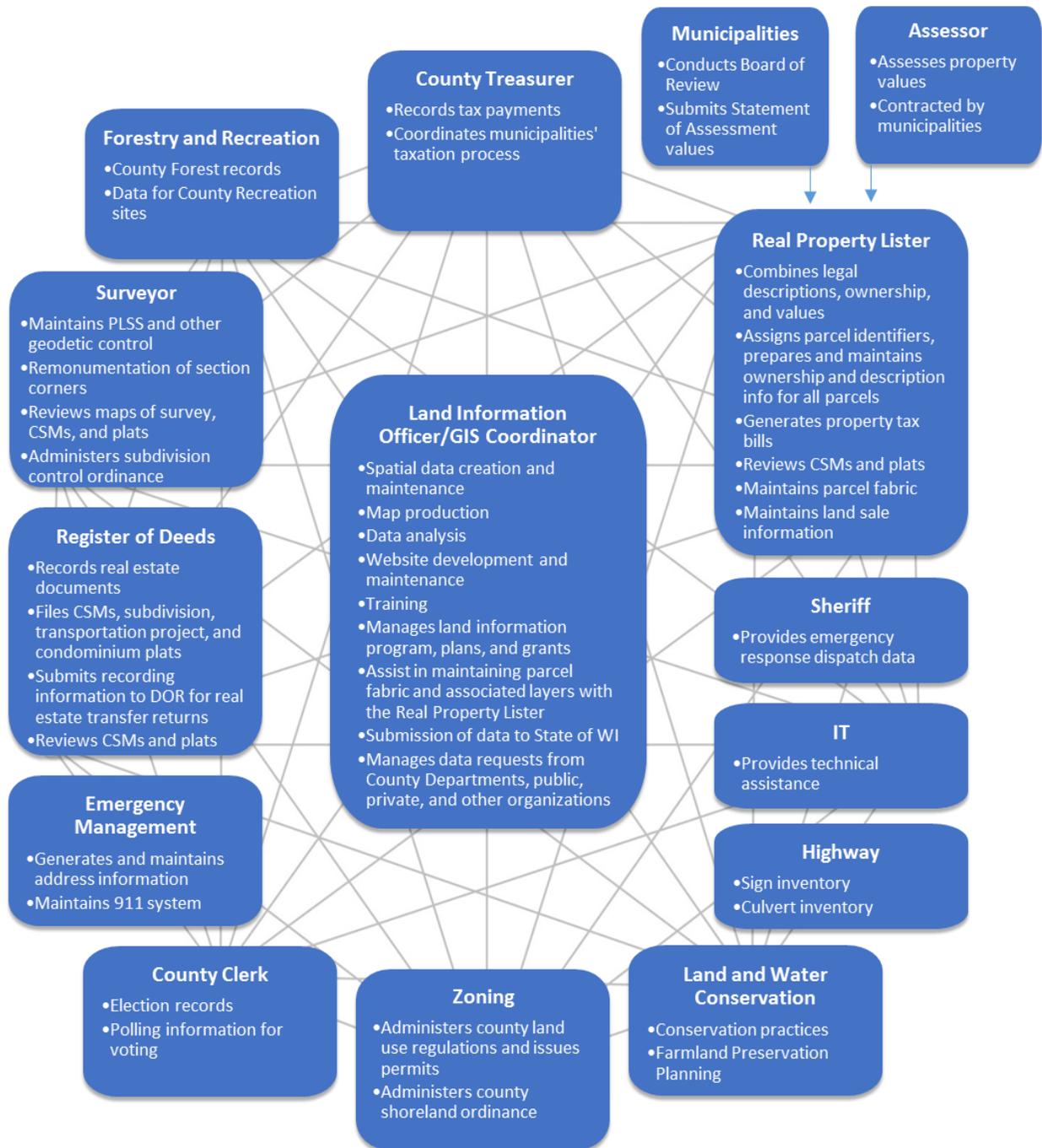
This chapter describes the design of the county land information system, with focus on how data related to land features and data describing land rights are integrated and made publicly available.

# Current Land Information System

## Diagram of Ashland County's Land Information System

The diagram in *Figure 1* is a representation of inter-organizational duties and tasks of individuals, offices and organizations that contribute to Ashland County's land information system.

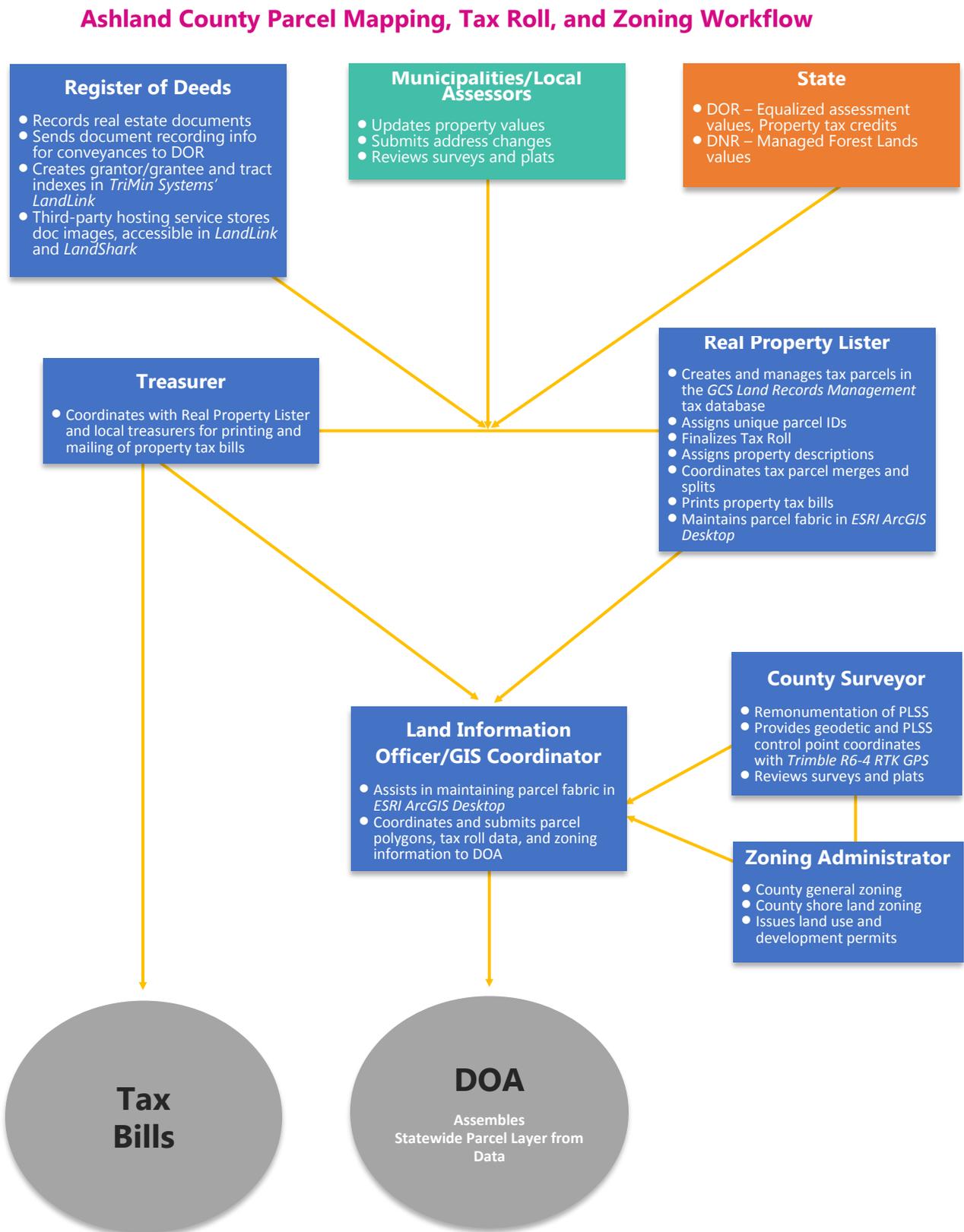
### Ashland County Land Information System



**Figure 1. The Ashland County land information diagram**

## County Parcel Data Workflow Diagram

The Diagram in *Figure 2* documents Ashland County's parcel mapping and tax roll data development and maintenance workflow.



**Figure 2. The Ashland County parcel workflow**

## Technology Architecture and Database Design

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

### Hardware

- The county utilizes an industry standard IPV4 networking environment organized by *Microsoft Domain Controller* servers and a network-switching environment. Most networking hardware is based on modern Gigabit twisted copper, with fiber optic between disparate county departments and the City of Ashland. All end user computer work stations are based on *Microsoft* operating systems enrolled in a *Microsoft Active Directory* management system.

### Software

- The county's information systems incorporate both database driven applications and user defined file management systems. Databases employed include Microsoft SQL server and Microsoft Access databases. The end user file management system is based on Microsoft Server System file server services.
- **ESRI's ArcGIS Desktop** – *ArcGIS Desktop* is used as the county's GIS for creating, storing, and maintaining its geographic land information, with the standard license and the 3D Analyst extension.
- **ESRI's ArcGIS Pro** – *ArcGIS Pro* was recently purchased and its usage is being explored.
- **GCS Software Treasurer's Collections and Property Assessment**– Tax and assessment databases and issuance of tax bills.
- **Simple Software by contractor/vendor TriMin Systems** – Document scanning.

### Website Development/Hosting

- The county's website is hosted by GovOffice and updated by county employees.
- **WebGuide Xtreme by Applied Data Consultants** –*WGXreme* is the county's main web mapping system.
- **ArcGIS Online** – Ashland County is now a verified organization account. It is used for public mapping, such as current road closures and our land sale properties, and for specific multiuser projects.
- **LandShark by contractor/vendor TriMin Systems** – Web application for public access to real estate documents.

## Metadata and Data Dictionary Practices

### Metadata Creation

- **Metadata creation and maintenance process:** Metadata is automatically created by ArcCatalog. No maintenance process have been determined.

### Metadata Software

- **Metadata software:** ArcCatalog is used to automatically create the metadata.
  - The software does generate metadata consistent with the FGDC Content Standard for Digital Geospatial Metadata, and/or ISO geographic metadata standard 19115.
- **Metadata fields manually populated:** Currently no metadata field are manually populated.

### Metadata Policy

- **Metadata Policy:** Ashland County does not have a policy on metadata requirements.

## Municipal Data Integration Process

- Data integration between the municipalities and Ashland County is on a request basis. No formal process is currently implemented.

- Ashland County is working closely with the municipalities to gather road data to update the roads layer. The process involves the GIS Coordinator, the Director of Emergency Management, and the municipality's representatives.
- The City of Ashland is the only municipality in the county that manages its own GIS system and maintains a parcel-mapping layer that is separate from the county. Ashland County is the official land information authority of tax parcel data.
- In the future, Ashland County is looking towards integrating more of the municipality's data into the County's Land Records.

## Public Access and Website Information

### Public Access and Website Information (URLs)

#### Public Access and Website Information

<b>GIS Webmapping Application(s) Link - URL</b>	<b>GIS Download Link - URL</b>	<b>Real Property Lister Link - URL</b>	<b>Register of Deeds Link - URL</b>
<a href="http://ashlandcowi.wgxtreme.com/">http://ashlandcowi.wgxtreme.com/</a>	<a href="https://data-ashlandcountywi.opendata.arcgis.com/">https://data-ashlandcountywi.opendata.arcgis.com/</a>	<a href="http://www.assessordata.org/">http://www.assessordata.org/</a>	<a href="https://landshark.co.ashland.wi.us/LandShark/login">https://landshark.co.ashland.wi.us/LandShark/login</a>

#### Single Landing Page/Portal for All Land Records Data

##### URL

<https://co.ashland.wi.us/gis>

## Data Sharing

### Data Availability to Public

#### Data Sharing Policy

- Ashland County provides completely free public viewing access of its land information data at three public access terminals in the Register of Deeds Office. The public can also access this land information over the internet, but cannot view real estate document images unless they are purchased. These purchased document fees are in-line with statutory requirements for reproducing real estate documents.
- Additionally, the county provides digital copies of the tax roll databases to the public upon request on a case-by-case basis. These requests are billed a nominal fee for the cost to reproduce the digital data.
- Ashland County is working towards providing free digitally downloadable GIS data to the public, and is currently sharing GIS data when requested.

#### Open Records Compliance

- The county's land information program provides many options for sharing its land information with the public so that it is compliant with Wisconsin's Open Records Law.

### Data Sharing Restrictions and Government-to-Government Data Sharing

#### Data Sharing Restrictions

- All data and information provided on the county's websites is subject to disclaimers and terms of use statements posted on these sites. Ashland County willingly shares its information as a matter of public record.

#### Government-to-Government Data Sharing

- Ashland County will provide data without fees to governmental agencies and their agents, and to anyone who requests the data for educational purposes.

### Training and Education

- Ashland County staff utilizes WLIP education and training funds to participate in workshops, seminars, and software training. Other training is taken on an as-needed basis when it arises throughout the course of the year. Oftentimes, these take place when new systems or operating procedures are implemented.

# 4 CURRENT & FUTURE PROJECTS

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

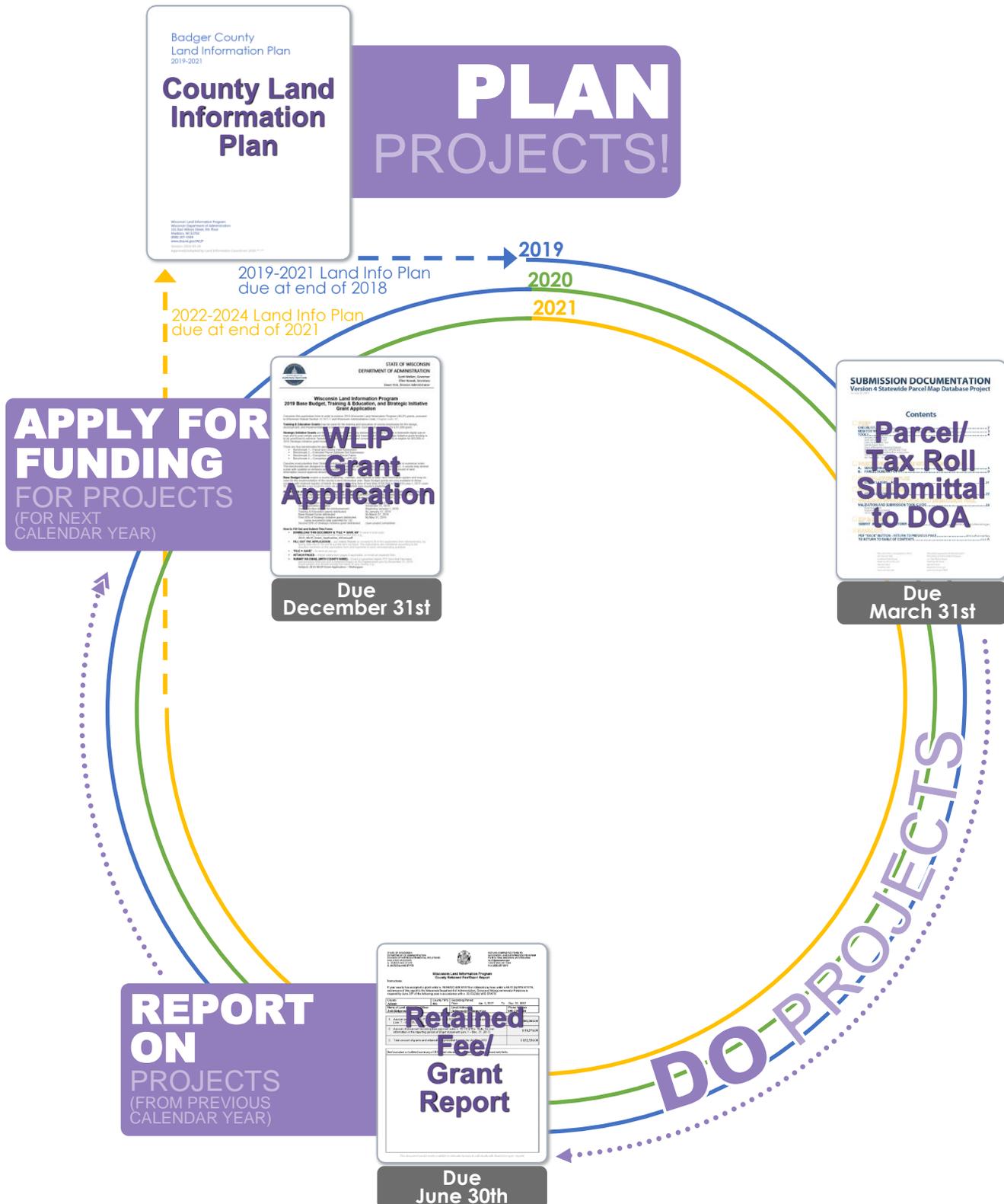


Figure 3. The WLIP Land Information Plan/Grant Project Cycle

# Project #1: Project Plan to Maintain Searchable Format (Benchmarks 1 & 2)

## Project Title: Project Plan to Maintain Searchable Format (Benchmarks 1 & 2)

### Project Description/Goal

#### How Searchable Format Will Be Maintained

- Ashland County will maintain the searchable format by continuing to integrate property and ownership records with the digital parcel maps by linking data through the PIN field.
- Currently, the county maintains parcel/tax roll data in such a way that **requires significant formatting every year**— completed by the GIS Coordinator, in-house.
- **Work needs to be done to make our attribute data standardized with the state submission request that requires little to no formatting.**

### Business Drivers

- The Project Plan to Maintain Searchable Format for Benchmarks 1 & 2 is a requirement for those counties who utilize Strategic Initiative funds for parcel/tax roll formatting to prepare the data submission to DOA.
- GIS Department, Land Description Department, the public and private sector.

### Objectives/Measure of Success

- The objective is to continue to meet the Searchable Format for Benchmarks 1 & 2 (Parcel and Zoning Data Submission, Extended Parcel Attribute Set Submission) without extreme formatting before data submission.

### Project Timeframes

Timeline – Project Plan to Maintain Searchable Format		
Milestone	Duration	Date
Project start	–	January 1, 2019
Format data for standardization	3 month	January 1-30, 2019
Project complete	–	March 1, 2019

### Responsible Parties

- Real Property Lister.
- GIS Coordinator.

### Estimated Budget Information

- See table at the end of this chapter for project budget information.

## Project #2: Project Plan for PLSS (Benchmark 4)

### Project Title: Project Plan for PLSS (Benchmark 4)

#### Project Description/Goal

##### Planned Approach

- The County Surveyor will continue to remonument, and establish survey-grade coordinates for PLSS corners and obtain geodetic control where it is currently nonexistent as time allows.

##### Current Status

- **Tally of the total number of corners:** See PLSS Layer Status table in Chapter 2.
- **Re monumentation status:** See PLSS Layer Status table in Chapter 2.
- **Coordinate status (accuracy class) if known:** Survey Grade.

##### Goals

- **Number of corners to be remonumented and/or rediscovered:** 100%
- **Number to have new coordinates established:** 100%
- **Accuracy class for these new coordinates:** Survey Grade.
- **Way in which these points will be integrated into the parcel fabric:** Coordinates are and will continue to be entered into parcel fabric as control points.
- The goal will be to have 100% of the county's PLSS corners remonumented with survey-grade coordinates on file by 2035.

##### Missing Corner Notes

- **Documentation for any missing corner data:** The County Surveyor will maintain documentation for any missing corner data for corners that are justifiably excluded.

##### County Boundary Collaboration

- The County Surveyor is reaching out to neighboring counties to discuss shared corners and share data as it is collected.

#### Business Drivers

- The Project Plan for PLSS is a requirement for those counties who utilize Strategic Initiative funds for work related to PLSS completion and integration.
- Gathering geodetic control on the county's PLSS corners will increase the accuracy of the parcel mapping, which is used by other municipalities, county departments, state agencies, real estate-related businesses, and the public. By increasing the accuracy of the county's parcel maps, the statewide parcel maps will be more accurate.

#### Objectives/Measure of Success

- The objective is to meet Benchmark 4 (Completion and Integration of PLSS) by 2035.

## Project Timeframes

Timeline – Project Plan for PLSS		
Milestone	Duration	Date
Project start	–	Mar 1, 2016
Remonumentation and establishing survey-grade coordinates for PLSS corners	19 years	Mar 1, 2016-Dec 31, 2035
Project complete	–	Dec 31, 2035

## Responsible Parties

- The County Surveyor is responsible for PLSS corner remonumentation.
- The GIS Coordinator and the Real Property Lister are responsible for updating the corners in the parcel fabric.

## Estimated Budget Information

- Budget information for this project is subject to change once the GIS Coordinator completes the inventory of the current PLSS corners.
- Based off the 2016 Land Information Plan update Ashland County has 1530 corners remaining to remonument. At 100 years a corner, that is about 16 years.
- Annually our part time surveyor would like to accomplish 100 corners.
- $100 * \$250 = \$25,000$ , just in cost of surveys alone.
- Additional \$5,000 for overhead costs
- Approximate budget for this project is \$30,000 annually at the current rates and our part time surveyor's time allowance.
- See table at the end of this chapter.

## Project #3: Update Orthoimagery with WROC in 2020

### Project Description/Goal

- The goal of this project is to update orthoimagery for Ashland County with the Wisconsin Regional Orthoimagery Consortium (WROC) and Ayres Associates in 2020.
- **Land Info Spending Category:** Orthoimagery

### Business Drivers

- The public sector, private sector, Ashland County Departments, and other governmental organizations.

### Objectives/Measure of Success

- Receive the orthoimagery of Ashland County from Ayres Associates.

### Project Timeframes

Timeline – Project #3 Update Orthoimagery with WROC in 2020#1 Title		
Milestone	Duration	Date
Project #1 start	–	Jan 1, 2020
Contractor flies imagery	1 month	Spring, 2020
Contractor processes data	1 year	2021
Project complete	–	Dec 31, 2021

### Responsible Parties

- Ayres Associates.

### Estimated Budget Information

- See table at the end of this chapter.

## Project #4: Create and Publish Open Data Site

### Project Description/Goal

- The goal of this project is to create an Ashland County GIS Open Data site that allows the public access to some of Ashland County's GIS Data for viewing and downloading.
- **Land Info Spending Category:** Website Development/Hosting Services

### Business Drivers

- The public sector, private sector, Ashland County Departments, and other governmental organizations.

### Objectives/Measure of Success

- Create and publish an Ashland County Open Data website.
- Upload some layers to ArcGIS Online for public access on the website.

### Project Timeframes

Timeline – Project #4 Create and Publish Open Data Site		
Milestone	Duration	Date
Project #2 start	–	Aug 1, 2018
Enable Open Data page	1 day	Aug, 2018
Format Open Data webpage	4 months	Aug, 2018; Nov 1, 2018 – Jan 30, 2019
Finalize data layers and upload to ArcGIS Online for Open Data site	4 months	Feb 1–June 31, 2019
Project complete	–	Dec 31, 2019

### Responsible Parties

- GIS Coordinator.

### Estimated Budget Information

- See table at the end of this chapter.

# Project #5: PLSS Quality Assurance and Quality Control

## Project Description/Goal

- The GIS Coordinator will manually recreating the PLSS layer building it from the original tie sheets recorded in Ashland County.
- Recreating the county's PLSS corners GIS layer will increase the accuracy of the parcel fabric, which uses the current inaccurate PLSS layer.
- This layer will be used to help the new County Surveyor determine which corners need to be remonumented and/or coordinates gathered.
- This layer will be integrated into the parcel fabric for more accurate parcel mapping.
- **Land Info Spending Category:** PLSS

## Business Drivers

- The public sector, private sector, Ashland County Departments, and other governmental organizations.
- State of Wisconsin.

## Objectives/Measure of Success

- Manually recreating the PLSS layer with the original recorded tie sheets.
- Create maps for the County Surveyor so they can determine which corners to remonument.
- Integrating this layer into the parcel fabric.

## Project Timeframes

Timeline – Project #5 PLSS Quality Assurance and Quality Control		
Milestone	Duration	Date
Project #5 start	–	Sept. 1, 2018
Manually build layer from recorded tie sheets	3 months	Nov, 2018-Jan, 2019
Creating maps for surveyor	1 month	
Integrate new layer into parcel fabric	1 year	Dec. 31, 2019
Project complete	–	Dec 31, 2019

## Responsible Parties

- GIS Coordinator.

## Estimated Budget Information

- See table at the end of this chapter.

## Project #6: Arc Enterprise implementation

### Project Description/Goal

- Implementation of Arc Enterprise for Ashland County's GIS. The need for the Enterprise is to have the ability to self-host our parcel map website for departmental use and for the public. The other goal of this is to connect the current Ashland County's GIS users. Enterprise will allow mapping layers to be drawn from the same source and updated across these 5 users automatically.
- **Land Info Spending Category:** Hardware/software

### Business Drivers

- Ashland County Departments, the public sector, private sector, and other governmental organizations.

### Objectives/Measure of Success

- Purchasing Enterprise package from ESRI.
- Installation process of the Enterprise.
- Attending trainings.
- Granting 5 departments or users access to the creator side of Enterprise. (Unlimited viewers).

### Project Timeframes

Timeline – Project #6: Arc Enterprise implementation		
Milestone	Duration	Date
Project #6 start	–	Jan. 1, 2019
Purchase Enterprise		
Install enterprise	3 days	
Attend training on Enterprise	5 days	
Begin working with Enterprise		
Project complete	–	Dec 31, 2019

### Responsible Parties

- GIS Coordinator.

### Estimated Budget Information

- See table at the end of this chapter.

## Project #7: Host an interactive parcel map website

### Project Description/Goal

- Ashland County currently has an interactive parcel map contracted with WGX. Now that Ashland has a GIS Coordinator, transitioning to a self-hosted parcel map will increase the interactive map's user abilities, rate of changes to the site, and layers available on the site.
- **Land Info Spending Category:** Website Development/Hosting Services

### Business Drivers

- The public sector, private sector, Ashland County Departments, and other governmental organizations.

### Objectives/Measure of Success

- Create map document that will be the interactive web map.
- Finalize data that will be used on the map. Especially, making the attributes easily understood.
- Lunch the new interactive parcel map.

### Project Timeframes

Timeline – Project #7: Host an interactive parcel map website		
Milestone	Duration	Date
Project #5 start	–	Jan. 1, 2019
Enterprise up and running		
Create map document		
Finalize data for map		
Lunch the new site		
Project complete	–	Dec 31, 2019

### Responsible Parties

- GIS Coordinator.

### Estimated Budget Information

- See table at the end of this chapter.

# Estimated Budget Information (All Projects)

Estimated Budget Information				
Project Title	Item	Unit Cost/Cost	Land Info Plan Citations Page # or section ref.	Project Total
1) <b>Project Plan to Maintain Searchable Format (Benchmarks 1 &amp; 2)</b>	Data cleanup of extended parcel attributes	Salary wages for Real Property Lister	Page 10 Page 31	-
				<b>\$5,000</b>
2) <b>Project Plan for PLSS (Benchmark 4)</b>	Remonumentation of PLSS corners- County Surveyor	100 corners per year	Page 8	Annually 30,000
		1530 corners remaining = 16 years 100 corners * \$250 = \$25,000 just in cost of surveys alone. Additional \$5,000 for overhead cost.	Page 32	
				<b>\$500,000</b>
3) <b>Update Orthoimagery with WROC in 2020</b>	Imagery update in 2020	111,760	Page 14 Page 34	-
				<b>\$111,760</b>
4) <b>Create and Publish Open Data Site</b>	Creating and publishing an open data site then uploading layers	Salary wages (40 hours *\$20.59)	Page 35	823.6
				<b>\$900</b>
5) <b>PLSS Quality Assurance and Quality Control</b>	Manually create PLSS layer from recorded tie sheets Creating maps for surveyor Integrate new layer into parcel fabric	Salary wages (~35 townships 1 township per 2 hours 70 hours *\$20.59)	Page 8-9 Page 36	1,441.3
				<b>\$1,500</b>
6) <b>Arc Enterprise implementation</b>	Purchase Enterprise	\$18,000	Page 26 Page 37	18,000
	Install Enterprise	\$14,000		14,000
				<b>\$32,000</b>
7) <b>Host an interactive parcel map website</b>	Annual maintenance from Esri	\$5,000	Page 10 Page 26	5,000
	Creation of the map document, web map, and finalize layers	Salary wages ~(320 hours *\$20.59 \$6588.80)	Page 38	6,500
	Annual upkeep and additions to the map - GIS Coordinator	Salary wages ~(4 hours a week 208 hours*\$20.59 \$4282.72)		4,500
				<b>\$16,000</b>
<b>GRAND TOTAL</b>				<b>\$651,176</b>

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

