Outagamie County Est. 1851

Land Information Plan

2025-2027

Department of
Development and Land Services

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EXECUTIVE SUMMARY

About this Document. This document is a land information plan for Outagamie County prepared by the land information officer (LIO) and the Outagamie 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 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 2023, Outagamie County was awarded $71,000 in WLIP grants and retained a total of $163,992 in local register of deeds document recording fees for land information.

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

Mission of the Land Information Office. In the next three years, Outagamie County's Land Information Office strives to be recognized for its exceptional web mapping sites, gains in governmental efficiencies by broadening the utilization of GIS, integrations of GIS and land records with other County business systems, improvements in parcel mapping accuracy, and responsiveness to meeting the land records needs of residents and businesses.

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

Outagamie County Land Information Projects: 2025-2027	
Project #1	**ArcGIS enterprise upgrades**
Project #2	**LiDAR data acquisition**
Project #3	**Back indexing Register of Deeds documents**
Project #4	**PLSS maintenance**
Project #5	**Large Format printer replacements**
Project #6	**Land records and GIS software maintenance**
Project #7	**Orthoimagery acquisition**
Project #8	**Create and update metadata for parcel fabric**
Project #9	**Staff development and training**

The remainder of this document provides more details on Outagamie 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.

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

- 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 Outagamie County is meeting these benchmarks appears in the Foundational Elements section of this plan document.

County Land Information System History and Context

Since the establishment of the Outagamie County Land Information Office in 1990, the County has completed several Land Information Plans which have identified goals and objectives for the County. Below, you will find several of the most significant accomplishments the County has met since those goals were identified.

- PLSS remonumentation and digitization.
- Digitization and data conversion of cadastral data (parcel mapping).
- Address and street centerline digitization.
- Development of web mapping.
- Contour/LiDAR acquisition and mapping.
- Floodplain mapping.
- Orthoimagery data acquisitions.
- Scanning/Indexing of Register of Deeds recorded documents.
- Web access to recorded Register of Deeds recorded documents.
- Open data site where data is available for free public download.
- All surveys filed with County surveyor are available on-line.

Outagamie County has used a combination of funds retained by the Register of Deeds office and State and Federal grants to accomplish these and other projects identified in the Land Information Plans.

County Land Information Plan Process

Counties must update and submit their plans to DOA for approval every three years. The 2025-2027 plan is to be completed at the end of 2024.

County Land Information Plan Timeline

- DOA release of finalized instructions by March 31, 2024.
- April–September 2024: Counties work on land info plans.
- Draft plans due to DOA by September 30, 2024 (but sooner is advised).
- Final plans with county land info council approval due by December 31st, 2024.

Plan Participants and Contact Information

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

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

- Register of Deeds
- Treasurer
- Real Property Lister or designee
- Member of the county board
- Representative of the land information office
- A realtor or member of the Realtors Association employed within the county
- A public safety or emergency communications representative employed within the county
- County surveyor or a registered professional land surveyor employed within the county
- Other members of the board or public that the board designates

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

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

Outagamie County Land Information Council and Plan Workgroup

Name	Title	Affiliation	Email	Phone
+ **Brad Bastian**	GIS/Land Information Manager	Outagamie County Development and Land Services	Brad.bastian@outagamie.org	920-832-5255
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+ **Rochelle Oskey**	Treasurer	Outagamie County Treasurer	Rochelle.oskey@outagamie.org	920-832-5065
+ **Rick Lautenschlager**	County Board Member	Outagamie County Board	Rick.Lautenschlager@outagamie.org	920-509-9040
+ **Jeremy Freund**	Environmental Engineer/Project Coordinator	Outagamie County Land Conservation	Jeremy.freund@outagamie.org	920-832-5076
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+ **Dave Yurk**	County Surveyor	Outagamie County Surveyor	David.Yurk@outagamie.org	920-832-2039
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+ **Michael Morman**	Assistant Highway Engineer	Outagamie County Highway	Michael.morman@outagamie.org	920-832-2247
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+ Land Information Council Members designated by the plus symbol

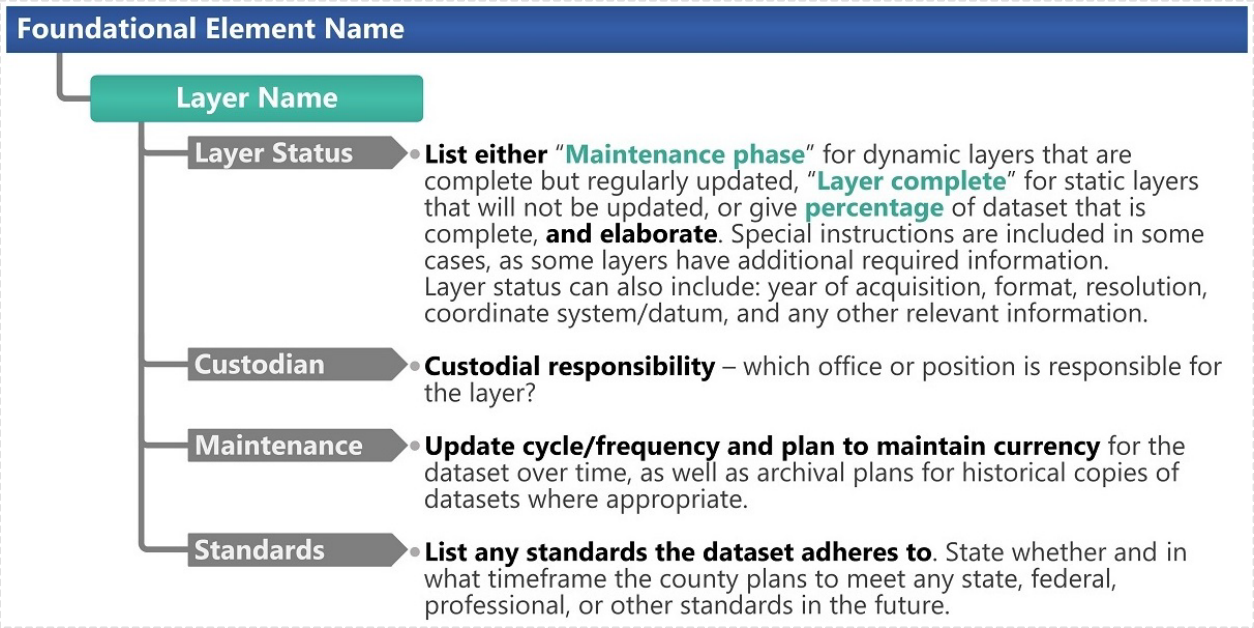
2 FOUNDATIONAL ELEMENTS

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.

FOUNDATIONAL ELEMENTS

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

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.



PLSS

Public Land Survey System Monuments

Layer Status

PLSS Layer Status	Status/Comments
Number of PLSS corners (selection, ¼, meander) **set in original government survey** that can be remonumented in your county	• 4030
Number of PLSS corners capable of being remonumented in your county that **have been remonumented**	• 4030
Number of remonumented PLSS corners with survey grade coordinates (see below for definition) • **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	• 4030
Number of survey grade PLSS corner coordinates integrated into county digital parcel layer (see definition of PLSS integration on page 37)	• 4030
Number of non-survey grade PLSS corner coordinates integrated into county digital parcel layer	• 0
Tie sheets available online?	• Yes – PLSS Viewer
Percentage of remonumented PLSS corners that have **tie sheets available online** (whether or not they have corresponding coordinate values)	• 100%
Percentage of remonumented PLSS corners that have tie sheets available online (whether or not they have corresponding coordinate values) **and a corresponding URL path/hyperlink value** in the PLSS geodatabase	• 0%
PLSS corners believed to be remonumented based on filed tie-sheets or surveys, but do not have coordinate values	• 0
Approximate number of PLSS corners believed to be lost or obliterated	• 0
Which system(s) for **corner point identification/ numbering** 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)?	• Wisconsin Corner Point Identification System (Romportl)
Does the county contain any **non-PLSS areas** (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?	• We maintain private claims in the township of Oneida and along the Fox River.
Total number of PLSS corners along each bordering county	• 323
Number of PLSS corners remonumented along each county boundary	• Waupaca 76; Shawano 61; Brown 79; Winnebago 61; Calumet 45
Number of remonumented PLSS corners along each county boundary with survey grade coordinates	• Waupaca 76; Shawano 61; Brown 79; Winnebago 61; Calumet 45

Custodian

- County Development and Land Services & County Surveyor

Maintenance

- As needed

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.
- North American Terrestrial Reference Frame of 2022 (NATRF2022)
- 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
- The County only uses survey grade.

Other Geodetic Control and Control Networks

92 HARN Monuments

Layer Status

- These are Wisconsin Department of Transportation monuments used for the height modernization program. The data was originally collected in State Plane Coordinates and was converted to the Wisconsin County Coordinate System – Outagamie County.

Custodian

- WI DOT

Maintenance

- Static

Standards

- Contact WI DOT

Parcel Mapping

Parcel Geometries

Layer Status

- **Progress toward completion/maintenance phase:** County-wide parcel layer is in the maintenance phase. In Outagamie County, 100% of the county's parcels are available in a commonly-used digital GIS format.
- **Projection and coordinate system:** Transverse Mercator projection and Wisconsin County Coordinate System – Outagamie County.
- **Integration of tax data with parcel polygons:** The County does have a parcel polygon model that directly integrates tax/assessment data as parcel attributes.
- **Online Parcel Viewer Software:** ESRI Web App Builder for ArcGIS
- **Unique URL path for each parcel record:** Yes
    - Tax Bill, Assessment, Recorded Document and parcel geometry can be accessed through this unique parcel URL. The URL is stable and can be exported.

Custodian

- County Development and Land Services

Maintenance

- **Update Frequency/Cycle:** Parcel polygons are updated daily.

Standards

- **Data Dictionary:** The data dictionary has the metadata for the parcel feature class characteristics.
- The data dictionary is not a separate document but instead is contained the dataset's metadata. Field definitions are explained in the metadata. The County adheres to the North American Profile of ISO 19115 2003 standard but can be exported to other formats.

Parcel Without Land Value

Layer Status

- **Number of parcels without a land value recorded to-date:** 26 parcels as of date 1/1/2024
- **County geolocates/maps parcels for improvements only and without a land value by:** creating a separate parcel for the buildings, improvements, and fixtures.

For (b.), indicate how the county maps these parcels without land values (select one):

- By creating new polygons and parcel stacking

Assessment/Tax Roll Data

Layer Status

- **Progress toward completion/maintenance phase:** NA
- **Tax Roll Software/App and Vendor name: Ascent Land Records Suite** – from contractor/vendor Transcendent Technologies
- **Municipal Notes:** City of Appleton does their own tax listing. City of Appleton is located in 3 counties and OC processes for the entire City.

Custodian

- County Property Listing

Maintenance

- **Maintenance of the Searchable Format standard:** To maintain the Searchable Format standard, the county will continue to format our data to meet statewide criteria for the statewide parcel database.
- **Searchable Format Workflow:**
    - The county maintains parcel/tax roll data in the Searchable Format or close enough to the Searchable Format that **little to no human labor is required** for

the annual submission of parcel/tax roll data to DOA.

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

Layer Status

- Outagamie County does have Non-Assessment/Tax Information Tied to Parcels including Permits and POWTS.

ROD Real Estate Document Indexing and Imaging

Layer Status

- **Grantor/Grantee Index:** Grantor/Grantee index is complete through January 1, 1985. Staff continues to back key and add information to those indexes.
- **Tract Index:** The tract index, ColorTract was scanned in and can be accessed online.
- **Imaging:** The County has all real estate record books scanned and available via the County's document imaging system, LaserFiche. Before 1985, a document number is the only way to find the document. After 1985, a name search can be used.
- **ROD Software/App and Vendor Name: Landshark** – from contractor/vendor TriMin.

Custodian

- County Register of Deeds

Maintenance

- Daily

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:** 2018
- **Accuracy:** 10cm
- **Post spacing:** 1 meter
- **Contractor's standard, etc.:** USGS standards
- **Next planned acquisition year:** 2025
- **QL1/QL2 acquisition plans:** N/A

Custodian

- County Development and Land Services

Maintenance

- Static

Standards

- FEMA (3DEP Q2)

LiDAR Project Derivatives/Deliverables include:

Hydro flattening breaklines, ESRI shapefile, polylineZ format.
1-ft contours, .shp format.
Classified Point Cloud, LAS v1.4 format.

HUC bare earth DEM mosaics
Bare earth DEM, .flt format.
Countywide DEM mosaic, .flt format.
First-return DSM, .flt format.
Intensity Imagery, GeoTIFF format.
Bare earth point cloud tiles, .txt format.
Model key point tiles, .txt format
Bare earth point cloud for highway right-of-way, .txt format

Layer Status
- Complete and delivered fall of 2018

Custodian
- County Land Conservation and Development & Land Services

Maintenance
- Static

Standards
- N/A

Other Types of Elevation Data

Layer Status
- Outagamie County does not have any other types of Elevation Data.

Orthoimagery

Orthoimagery

Layer Status
- **Most recent acquisition year:** 2023
- **Resolution:** 6"
- **Contractor's standard:** Spring – Leaf off
- **Next planned acquisition year:** 2025

Custodian
- County Development and Land Services

Maintenance
- Static

Standards
- WROC – National Map Accuracy Standards

Historic Orthoimagery

Layer Status
- 1938, 1957, 1964, 1970, 1980, 1992, 2000, 2005, 2010, 2014, 2018, 2021

Custodian
- County Development and Land Services

Maintenance
- Will add year after new acquisition is processed and available.

Standards
- N/A

Other Types of Imagery

Layer Status
- Outagamie County does not have any other types of imagery.

Address Points and Street Centerlines

Address Point Data

Layer Status

- Complete

Custodian

- County Development and Land Services

Maintenance

- Daily

Standards

- Spillman CAD/Shared Winnebago/Calumet data model

Building Footprints

Layer Status

- There are two sets, one from 2010 and another from 2014. This data was created based off the respective year's Orthoimagery.

Custodian

- County Development and Land Services

Maintenance

- Static

Standards

- N/A

Other Types of Address Information

Address Ranges

Layer Status

- Address range data are attributed to our street centerline data. This was created in 2000 and has been continually enhanced.

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Spillman CAD & Shared with Winnebago and Calumet County data model

Street Centerlines

Layer Status

- 100% Complete

Custodian

- County Development and Land Services

Maintenance

- Daily

Standards

- Spillman CAD & Shared with Winnebago and Calumet County data model

Rights of Way

Layer Status

- Right of way polygons are a separate layer in the cadastral dataset

Custodian

- County Development and Land Services

Maintenance

- Daily with other cadastral layers

Standards

- Follow County Development and Land Services topology rules

Trails

Recreational Trails,

Layer Status

- 100%

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Edited based on current Orthoimagery

Snowmobile Trails

Layer Status

- 100%

Custodian

- Local snowmobile clubs edit directly through AGO – County parks act as liaison

Maintenance

- Annual

Standards

- N/A

Land Use

Current Land Use

Layer Status

- Land use based off of 2014 orthophotography

Custodian

- East Central Regional Planning Commission

Maintenance

- Static

Standards

- Contact ECWRPC

Future Land Use

Layer Status

- 100% complete – based on County comprehensive plan

Custodian

- County Development and Land Services

Maintenance

- As needed

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.
- Includes Towns of Bovina, Black Creek, Center, Cicero, Dale, Deer Creek, Ellington, Freedom,

Liberty, Maple Creek, Oneida, Osborn, Seymour and Vandenbroek. General zoning is not parcel based.

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Must follow legal description and County zoning ordinance

Shoreland Zoning

Layer Status

- The County does maintain a GIS representation of County shoreland zoning boundaries.

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- See County zoning ordinances.

Farmland Preservation Zoning

Layer Status

- The County does maintain a GIS representation of County farmland preservation zoning.
- **Year of certification:** 2023

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- DATCP

Floodplain Zoning

Layer Status

- The county's floodplain zoning GIS data is not the same as/identical to the FEMA map. Outagamie County has a more restrictive ordinance than FEMA's map depict, however this is currently not mapped in GIS.
- 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.

Custodian

- FEMA/County Development and Land Services

Maintenance

- As needed

Standards

- FEMA

Airport Protection

Layer Status

- The County does maintain a GIS representation of airport protection zoning boundaries.
- **Airport protection zoning map depicts:**
- Height limitation restrictions
- General zoning overlay for airport protection

Custodian

- County Development and Land Services & Bureau of Aeronautics

Maintenance

- As needed

Standards

- County zoning ordinance

Municipal Zoning Information Maintained by the County

Layer Status

- Town of Grand Chute, Hortonia, Buchanan, and Kaukauna have their own zoning that we maintain. Town of Maine has no zoning.

Custodian

- Development and Land Services GIS Staff

Maintenance

- As needed

Standards

- Zoning Data follows legal description

Administrative Boundaries

Civil Division Boundaries

Layer Status

- 100% complete Town, City and Village municipality layer

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Boundaries changed based on recorded legal documents.

School Districts

Layer Status

- **Progress toward completion/maintenance phase:** 100% complete school district layer.
- **Relation to parcels:** Created and based off of the tax roll data.
  - **Attributes linked to parcels:** Parcel layer with school district name as an attribute.

Custodian

- County Development and Land Services

Maintenance

- Updated once a year after the data freeze of the current tax year.

Standards

- Follow parcel boundaries

Election Boundaries

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

Layer Status

- The layers listed above are 100% complete.
- Ward boundaries were created from the 2020/2021 redistricting process and edited due to any annexations reported to County Clerk. The wards were updated during 2024 due to state adopting new boundary maps for legislative and congressional districts.

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Ward data is edited due to recorded municipal annexations via legal description.

Utility Districts

Gas and Electric Service Area

Layer Status

- Received data from the Wisconsin Public Service Commission

Custodian

- Wisconsin Public Service Commission

Maintenance

- Static

Standards

- Contact Wisconsin Public Service Commission

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Ward data is edited due to recorded municipal annexations via legal description.

Emergency Service Boundary – Law/Fire/EMS

Layer Status

Law Enforcement: 100% complete
Fire: 100% complete
EMS: 100% complete

Custodian

County Development and Land Services

Maintenance

As needed

Standards

Wisconsin GIS NG9-1-1 Data Standard (Emergency Service Boundary)
The County uses a localized topology standard that is compatible with Spillman 911 systems.

Public Safety Answering Points (PSAP) Boundary

Layer Status

- **PSAP Boundary:** PSAP boundary coincides with the entire county boundary

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Wisconsin GIS NG9-1-1 Data Standard (PSAP Boundary)

Provisioning Boundary

Layer Status

- **Provisioning Boundary**: Provisioning boundary coincides with the entire county boundary

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Wisconsin GIS NG9-1-1 Data Standard (Provisioning Boundary)

Healthcare Facilities

Layer Status

- Outagamie County health care facilities currently complete

Custodian

- Health & Human Services Department

Maintenance

- As needed

Standards

- No typical standards

Lake Districts

Layer Status

- Outagamie County does not have a lake district boundary

Custodian

- N/A

Maintenance

- N/A

Standards

- N/A

Native American Lands

Layer Status

- Outagamie County property related information describing land owned by the Oneida Tribe of Indians and land held in USA Trust for Oneida Tribal members. This layer was created from the tax roll data.

Custodian

- County Development and Land Services

Maintenance

- Annually

Standards

- Follows parcel standards

Other Administrative Districts

Forest land, parks and open space

Layer Status

- 100% complete

Custodian

- Development and Land Services GIS Staff

Maintenance

- Updated as we are notified of changes

Standards

- Created from orthoimagery, parcel data and submissions from municipalities

Other Layers

Hydrography Maintained by County or Value-Added

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

Layer Status

- Navigable/Non-navigable streams and 300' buffers of navigable streams are 100% complete. Hydro flattening breaklines acquired with 2018 LiDAR data.

Custodian

- County Development and Land Services

Maintenance

- As needed

Standards

- Must be determined navigable by Wisconsin DNR or County Development and Land Services
- Hydro flattening breaklines based on National Geospatial Program LiDAR Base Specification version 1.2.

Cell Phone Towers

Layer Status

- Created layer in 2008 of all existing cell towers

Custodian

- County Sheriff – Communication Center

Maintenance

- Ended maintenance 2010

Standards

- N/A

Bridges and Culverts

Layer Status

- Bridges are 100% complete. Highway culverts have been 100% identified but not completely attributed. Driveway culverts are 45% inventoried.

Custodian

- County Highway and Land Conservation

Maintenance

- Annually (Summer)

Standards

- Data is created and maintained using data integrity standard template that was created by County Highway and Land Conservation.

Other/Miscellaneous

Pipelines

Layer Status

- The U.S. Department of Transportation (U.S. DOT), Pipeline and Hazardous Materials Safety Administration (PHMSA) is working with other federal and state agencies and the pipeline industry to create a National Pipeline Mapping System (NPMS). The NPMS is a full-featured geographic information system (GIS) containing the location and selected attributes of the major gas transmission and hazardous liquid transmission pipelines operating in United States and other offshore entities. The NPMS also contains the location of Liquefied Natural Gas (LNG) plants and some breakout tanks. Michael Baker Jr., Inc. (Baker), as the primary contractor assumes all responsibilities of the NPMS National Repository regarding NPMS database updates, synchronization, and maintenance. Source data is contributed annually by pipeline operators to the National Repository. This metadata is for the entire national dataset. Distribution of NPMS data is handled for PHMSA by the National and repository and is limited to pipeline operators and local, state, and federal government officials. Neither the United States Government nor any party involved in the creation and compilation of NPMS data and maps guarantees the accuracy or completeness of the products. NPMS data has a target accuracy of +/- 500 feet and resides in geographic coordinates. NPMS data must never be used as a substitute for contacting the appropriate local one-call center prior to digging.

Custodian

- US DOT

Maintenance

- Static

Standards

- Contact US DOT

3 LAND INFORMATION SYSTEM

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

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

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

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

Current Land Information System

Diagram of County Land Information System

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's current environment is comprised of both internal and cloud solutions. Outagamie County utilizes three production ArcGIS servers, three database servers, and hosts web services and applications internally as well as in ArcGIS Online. The County uses a virtual environment with a backup center.

Software

- Software used includes ESRI and Microsoft suite as well as a number of third party add-on tools that integrate with these systems. Treasurer's office uses the Ascent Land Records system. Register of Deeds uses TriMIN products. The County uses LaserFiche for the document management.
- **County currently uses ArcGIS Pro:** Yes
- **County plans to upgrade to ArcGIS Pro:** N/A

Website Development/Hosting

- The County uses an internal development environment as well as ArcGIS Online for hosting data and web applications. Access to permit & planning applications are available through our interactive GIS web application by a direct URL to our web based CityView Portal. Integration of tax parcel data (ascent) also available via URL in our web applications.

Metadata and Data Dictionary Practices

Metadata Creation

- **Metadata creation and maintenance process:** We use Arc Catalog to create and maintain the feature dataset and feature class metadata. The metadata is consistent with the FGDC Content Standard for Digital Geospatial Metadata. The metadata is included with each feature class on our data download website.

Metadata Software

- **Metadata software:**
  - The software does generate metadata consistent with the FGDC Content Standard for Digital Geospatial Metadata, and ISO geographic metadata standard 19115.
- Metadata software:
  - The software does generate metadata consistent with the FGDC Content Standard for Digital Geospatial Metadata, and ISO geographic metadata standard 19115.
- **Metadata fields manually populated:** The County does not manually populate any metadata fields.

Metadata Policy

- **Metadata Policy:** Our organization does not have any policies for metadata creation, however we do make every effort in supplying the minimum FGDC requirements.

Municipal Data Integration Process

- City of Appleton and Outagamie County have a memorandum of understanding for Outagamie County to host Appleton's parcel, street centerline and address data within our ArcGIS environment.
- Outagamie County currently hosts a tri-county 911 database maintained between Outagamie County, Calumet County, and Winnebago County.
- Through a group collaboration hosted by the County's ArcGIS Online organization, multiple municipalities share hydrant data to be utilized in the County's 911 system.

Public Access and Website Information

Public Access and Website Information (URLs)

Public Access and Website Information			
GIS Web mapping Application(s) Link - URL	**GIS Download Link – URL**	**Real Property Lister Link - URL**	**Register of Deeds Link - URL**
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=159e7683a01e49b58be7949f86086097	http://gis.outagamie.org/maps/lidar/index.html	https://ascent.outagamie.org/LandRecords/PropertyListing/RealEstateTaxParcel#/Search	https://landshark.co.outagamie.wi.us/LandShark/login.jsp?logout=1&url=https%3A%2F%2Flandshark.co.outagamie.wi.us%2FLandShark%2Fsearchname.jsp
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=4ac5d13c935c490cbdaac9118a78c43d	http://data-ocgis.opendata.arcgis.com/		
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=e66ddf2a0f1240cc8d644dafc617299e			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=bfa2ef27869d4959a302df94964f0c7f			
https://www.outagamie.org/government/departments-n-z/sheriff/foreclosures-sheriff-sales			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=05e9c895cc8d4828a401959329eea779			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=e285a9e9ba6548708689ccc0a3921c99			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=62ac1431c84a408795ecbf594bba9030			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=9ebe4c740db849fea7757017da759785			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=f6a8d84e4e9a4bbd8e0b2166d3202a42			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=6d749ee424f4436f81761a6b14e1266b			
https://ocgis.maps.arcgis.com/apps/webappviewer/index.html?id=13f555139a64462187226bd4356ecf5b			
https://www.outagamie.org/government/departments-a-e/development-and-land-services/gis-land-information			

Single Landing Page/Portal for All Land Records Data
URL
https://www.outagamie.org/gis

Web Services/REST End Points
URL
https://gis.outagamie.org/arcgis/rest/services

Data Sharing

Data Availability to Public

Data Sharing Policy

- Data is updated weekly and shared by map services, web applications and a free data download site. (see above table)

Open Records Compliance

- We have policies and procedures in place to comply with WI Status 19.31 – 19.39. All of the County's GIS data has been available free of charge for nearly a decade. If an open records request is made staff consults with corporation counsel and DOJ guidebook to ensure it is fulfilled accordingly.

Data Sharing Restrictions and Government-to-Government Data Sharing

Data Sharing Restrictions

- Outagamie County does not have any restrictions on data distribution or download.

Training and Education

- During the annual budget process, training and education is a high priority for our staff. We encourage our team to attend local, regional and national conferences and training if applicable on a rotational basis.

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.

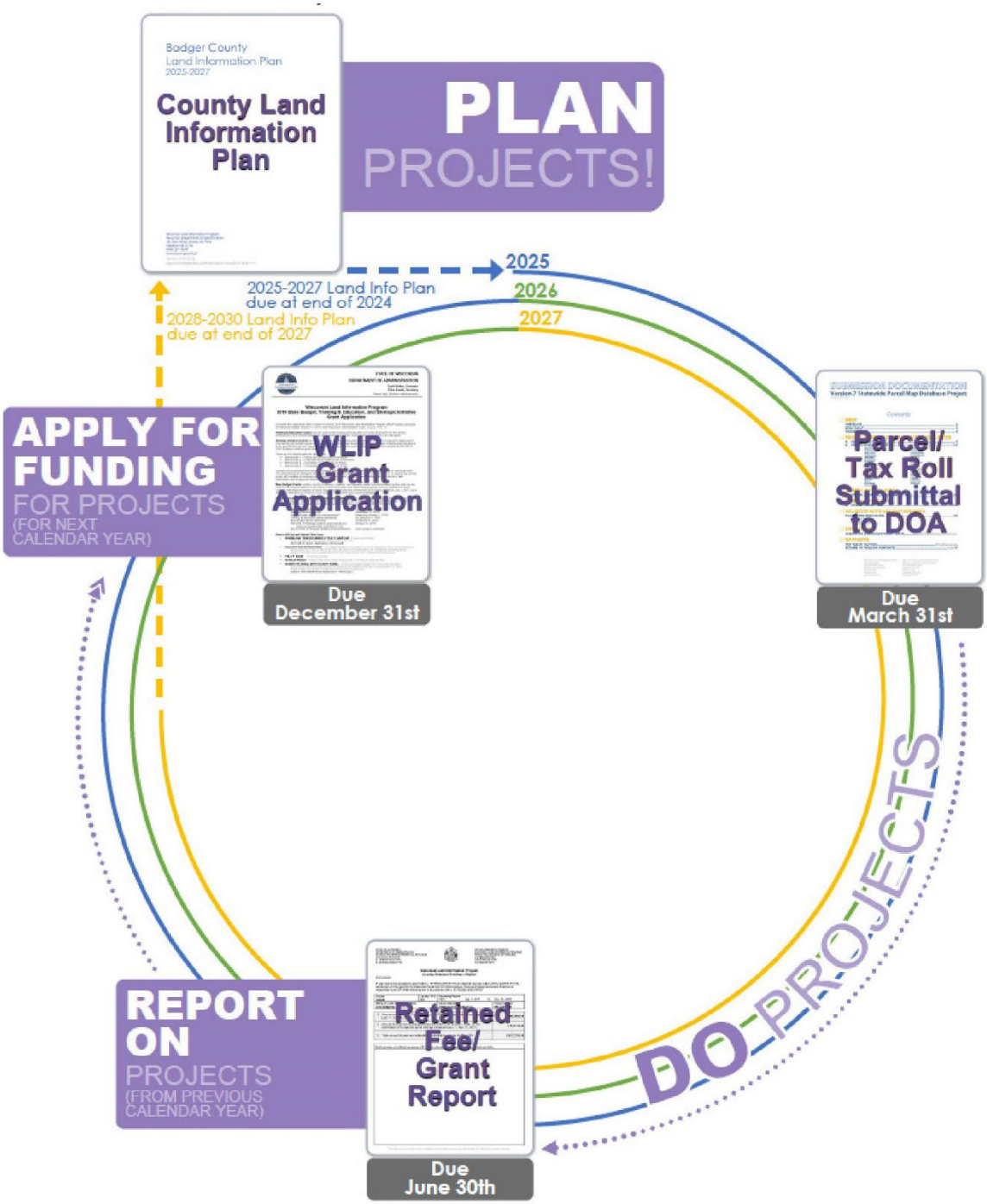


Figure 1. The WLIP Land Information Plan/Grant Project Cycle

Project #1: ArcGIS Enterprise Upgrades

Project Description

- To provide an easier and more efficient way to organize our services and web maps and share them with groups of users.
- **Land Info Spending Category:** Software/Hardware

Business Drivers

- To provide the organization with the latest available ArcGIS enterprise enhancements and features, ensuring its security, reliability and performance.

Objectives/Measure of Success

- Architecture and software is in place and functional

Project Timeframes

- 2025
- 2026
- 2027

Responsible Parties

- GIS Engineer
- GIS Spatial Analyst
- IT Senior Systems Engineer
- Consultant

Project #2: LiDAR Data Acquisition

Project Description

- Acquire QL1 LiDAR data
- Land Info Spending Category: LiDAR

Business Drivers

- Regular update cycle monitors change
- Development and utility improvements
- Rural broadband expansion
- Readiness for hydrography updates
- Best chance for funding partners
- 4x data density for improved accuracy and feature extraction

Objectives/Measure of Success

- Acquisition is complete and data is delivered

Project Timeframes

- 2025-2027

Responsible Parties

- USGS
- Ayres

Estimated Budget Information

- See table at the end of this chapter.

Project #3: Back Indexing ROD Documents

Project Description

- This work is necessary to complete back indexing prior to 1985.
- Land Info Spending Category: OTHER – Allow digital access to additional ROD documents

Business Drivers

- Allows for greater search flexibility, therefore freeing up staff time in several County departments.

Objectives/Measure of Success

- Allows for public/customer to access these records with search by name capability.

Project Timeframes

- 2025-2027

Responsible Parties
- Register of Deeds and TriMIN

Estimated Budget Information
- See table at the end of this chapter.

Project #4: PLSS Maintenance

Project Description
- Continually maintain survey grade PLSS
- Land Info Spending Category: PLSS

Business Drivers
- To maintain survey grade accurate PLSS monuments.

Objectives/Measure of Success
- Retain and maintain survey grade PLSS monuments rotationally so the data is readily available to anyone that needs it.

Project Timeframes
- Two townships per year

Responsible Parties
- County Surveyor and Development and Land Services

Estimated Budget Information
- See table at the end of this chapter.

Project #5: Large Format Printer Replacements

Project Description
- Replace large format printer for DLS, ROD and/or Land Conservation
- Land Info Spending Category: Hardware

Business Drivers
- Existing printers are near end of life

Objectives/Measure of Success
- New printer

Project Timeframes
- 2027

Responsible Parties
- County Development and Land Services, ROD and Land Conservation

Estimated Budget Information
- See table at the end of this chapter.

Project #6: Land Records Software Maintenance

Project Description
- Annual maintenance of land records software
- Land Info Spending Category: Software

Business Drivers
- Critical to stay current as technology changes.

Objectives/Measure of Success
- Stay current with industry trends and integrations.

Project Timeframes
- Annual

Responsible Parties
- County Development and Land Services, Register of Deeds, Land Conservation, IT, Highway

Estimated Budget Information
- See table at the end of this chapter.

Project #7: Orthoimagery

Project Description

- Acquire high resolution Orthoimagery
- Land Info Spending Category: Orthoimagery

Business Drivers

- Land use planning
- Zoning violations
- Changing landscape
- Reduce time spent on field verification

Objectives/Measure of Success

- Accurate orthophotography tied to PLSS
- Clear, minimal distortion and building lean

Project Timeframes

- 2025/2027

Responsible Parties

- Hired Contractor, Outagamie County DLS and Highway Departments

Estimated Budget Information

- See table at the end of this chapter.

Project #8: Create and update metadata for Parcel Fabric Layers

Project Description

- Create and update metadata for parcel fabric layers

Business Drivers

- Provides accurate timeframe and definitions for users.

Objectives/Measure of Success

- Create metadata for users who download the data as well as internal staff.

Project Timeframes

- 2025-2027

Responsible Parties

- Outagamie County GIS Staff

Estimated Budget Information

- See table at the end of this chapter.

Project #9: Staff Development and Training

Project Description

- Educate and network with other GIS professionals on changing and emerging technology
- Land Info Spending Category: Training and Education

Business Drivers

- Changing and emerging technology
- Using software to create workflow efficiency
- Improve communication and cooperation within the organization as well as other stakeholders
- Transparency

Objectives/Measure of Success

- High quality land information and GIS data that is easy to use

Project Timeframes

- Ongoing

Responsible Parties

- Development and Land Services, Register of Deeds, Land Conservation and Highway Departments

Estimated Budget Information

- See table at the end of this chapter.

Completed Projects

- NextGen 911 implementation
- ArcGIS Enterprise Migration
- Orthoimagery Acquisition
- PLSS Maintenance
- Parcel Fabric Migration

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) ArcGIS Enterprise Upgrades	GIS Consultant	$5,000/ea	Page 27		**$15,000**
2) LiDAR Data Acquisition	LiDAR Acquisition	$110,000	Page 27		**$110,000**
	Additional Derived products	$50,000	Page 27		**$50,000**
3) Back Indexing Register of Deeds Documents	Consultant	$50,000/yr	Page 27-28	**x 3**	**$150,000**
4) PLSS Maintenance	Surveying Services	$30,000/yr	Page 28	**x 3**	**$90,000**
5) Large Format Printer Replacement	Hardware	$15,000/ea	Page 28	**x 2**	**$30,000**
6) Land Records Software Maintenance	Software Maintenance	$150,000/yr	Page 28	**x 3**	**$450,000**
7) Orthoimagery	Imagery Acquisition	$60,000/ea	Page 29	**x 2**	**$120,000**
8) Create and Update Metadata for Parcel Fabric Data	GIS Consultant	$5,000	Page 29		**$5,000**
9) Staff Development and Training	Training/Conferences	$20,000/yr	Page 29	**x 3**	**$60,000**
				GRAND TOTAL	**1,080,000**

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