Green Lake County
Land Information Plan
2019-2020-2021
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EXECUTIVE SUMMARY

About this Document. This document is a Land Information Plan for Green Lake County prepared by the Land Information Officer (LIO) and the Green Lake 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 2018, Green Lake County was awarded $121,000 in WLIP grants and retained a total of $30,000 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 Green Lake 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 Green Lake 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, Green Lake County’s Land Information Office strives to be recognized for its exceptional webmapping site, gains in governmental efficiencies by broadening the utilization of GIS, improvements in parcel mapping accuracy, and responsiveness to meeting the land records needs of residents 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:

<table>
<thead>
<tr>
<th>Project #</th>
<th>Project Plan for PLSS (Benchmark 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #2</td>
<td>2020 Orthoimagery Update</td>
</tr>
<tr>
<td>Project #3</td>
<td>Organize Highway Plats</td>
</tr>
<tr>
<td>Project #4</td>
<td>Nutrient Management Planning Software 2019</td>
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<td>Project #5</td>
<td>Register of Deeds document software</td>
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<tr>
<td>Project #8</td>
<td>Multi-function large format printer/scanner</td>
</tr>
</tbody>
</table>

The remainder of this document provides more details on Green Lake 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.
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)

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

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

**County Land Information System History and Context**
The Land Information Office (Register of Deeds) and Land Information Committee were established in 1990 by Resolution 30-1990. The Land Use Planning & Zoning Dept. became the Land Information Office by Res. 17-2005 to coincide with the Land Information Officer. The Land Information “Committee” was replaced by the Land Information “Council” by Res. 28-2010.

**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 2019-2020-2021 plan, completed at the end of 2018, is the second post-Act 20 required update.

Plan dates:
2016-2017-2018
2019-2020-2021

**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 and the Green Lake County Land Information Council as listed below.
<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harley Reabe, Chair</td>
<td>County Board Chair</td>
<td><a href="mailto:hreabe@co.green-lake.wi.us">hreabe@co.green-lake.wi.us</a></td>
<td>920-294-4031</td>
</tr>
<tr>
<td>Sarah Guenther, Vice-Chair</td>
<td>Register of Deeds</td>
<td><a href="mailto:sguenther@co.green-lake.wi.us">sguenther@co.green-lake.wi.us</a></td>
<td>920-294-4024</td>
</tr>
<tr>
<td>Liz Otto, Secretary</td>
<td>County Clerk</td>
<td><a href="mailto:lotto@co.green-lake.wi.us">lotto@co.green-lake.wi.us</a></td>
<td>920-294-4010</td>
</tr>
<tr>
<td>Paul Gunderson</td>
<td>County Conservationist</td>
<td><a href="mailto:pgunderson@co.green-lake.wi.us">pgunderson@co.green-lake.wi.us</a></td>
<td>920-294-4055</td>
</tr>
<tr>
<td>Matt Kirkman</td>
<td>Land Use Planning &amp; Zoning Director</td>
<td><a href="mailto:mkirkman@co.green-lake.wi.us">mkirkman@co.green-lake.wi.us</a></td>
<td>920-294-4175</td>
</tr>
<tr>
<td>Don Lenz</td>
<td>County Surveyor</td>
<td><a href="mailto:dlenz@co.green-lake.wi.us">dlenz@co.green-lake.wi.us</a></td>
<td>920-294-4026</td>
</tr>
<tr>
<td>Mark Podoll</td>
<td>Sheriff</td>
<td><a href="mailto:mpodoll@co.green-lake.wi.us">mpodoll@co.green-lake.wi.us</a></td>
<td>920-294-4134</td>
</tr>
<tr>
<td>Bob Schneider</td>
<td>Realtor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gerald Stanuch</td>
<td>GIS Specialist</td>
<td><a href="mailto:gstanuch@co.green-lake.wi.us">gstanuch@co.green-lake.wi.us</a></td>
<td>920-294-4174</td>
</tr>
<tr>
<td>Amanda Toney</td>
<td>Treasurer/Real Property Lister</td>
<td><a href="mailto:atoney@co.green-lake.wi.us">atoney@co.green-lake.wi.us</a></td>
<td>920-294-4019</td>
</tr>
</tbody>
</table>
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.

2 FOUNDATIONAL ELEMENTS

<table>
<thead>
<tr>
<th>FOUNDATIONAL ELEMENTS</th>
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</tr>
<tr>
<td>Other Layers</td>
</tr>
</tbody>
</table>
### PLSS

## Public Land Survey System Monuments

### Layer Status

<table>
<thead>
<tr>
<th>PLSS Layer Status</th>
<th>Status/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of PLSS corners (selection, ¼, meander) set in original government survey that can be remonumented in your county</td>
<td>1855</td>
</tr>
<tr>
<td>Number and percent of PLSS corners capable of being remonumented in your county that have been remonumented</td>
<td>1483 (80%)</td>
</tr>
<tr>
<td>Number and percent of remonumented PLSS corners with survey grade coordinates (see below for definition)</td>
<td>1483 (80%)</td>
</tr>
<tr>
<td>- 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</td>
<td></td>
</tr>
<tr>
<td>- SUB-METER – point precision of 1 meter or better</td>
<td></td>
</tr>
<tr>
<td>- APPROXIMATE – point precision within 5 meters or coordinates derived from public records or other relevant information</td>
<td></td>
</tr>
<tr>
<td>Number and percent of survey grade PLSS corners integrated into county digital parcel layer</td>
<td>1483 (100%)</td>
</tr>
<tr>
<td>Number and percent of non-survey grade PLSS corners integrated into county digital parcel layer</td>
<td>372 (100%)</td>
</tr>
<tr>
<td>Tie sheets available online?</td>
<td>Yes (<a href="https://maps.sco.wisc.edu/surveycontrolfinder/">https://maps.sco.wisc.edu/surveycontrolfinder/</a>)</td>
</tr>
<tr>
<td>Percentage of remonumented PLSS corners that have tie sheets available online (whether or not they have corresponding coordinate values)</td>
<td>100%</td>
</tr>
<tr>
<td>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</td>
<td>100%</td>
</tr>
<tr>
<td>PLSS corners believed to be remonumented based on filed tie-sheets or surveys, but do not have coordinate values</td>
<td>0</td>
</tr>
<tr>
<td>Approximate number of PLSS corners believed to be lost or obliterated</td>
<td>372</td>
</tr>
<tr>
<td>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)?</td>
<td>Sequential page number of tie sheet as filed (0001-1858)</td>
</tr>
<tr>
<td>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?</td>
<td>No</td>
</tr>
<tr>
<td>Total number of PLSS corners along each bordering county</td>
<td>191</td>
</tr>
<tr>
<td>Number and percent of PLSS corners remonumented along each county boundary</td>
<td>160 (84%)</td>
</tr>
<tr>
<td>Number and percent of remonumented PLSS corners along each county boundary with survey grade coordinates</td>
<td>160 (84%)</td>
</tr>
<tr>
<td>In what ways does your county collaborate with or plan to collaborate with neighboring counties for PLSS updates on shared county borders?</td>
<td>Case-by-case basis between County Surveyors and Highway Depts.</td>
</tr>
</tbody>
</table>

### Custodian
- County Surveyor

### Maintenance
- Field check any corners with a last visited date over 20 years

### Standards
- Statutory Standards for PLSS Corner Remonumentation
  - s. 59.74, Wis. Stats. Perpetuation of section corners, landmarks.
- s. 60.84, Wis. Stats. Monuments.
- s. 236.15, Wis. Stats. Surveying requirement.

- 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
- NA

### Parcel Mapping

#### Parcel Geometries

- **Layer Status**
  - Progress toward completion/maintenance phase: In Green Lake County, 100% of the county’s parcels are available in a commonly-used digital GIS format.
  - Projection and coordinate system: WISCRS (Wisconsin Coordinate Reference System)
  - 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 not use or plan to implement the Esri Parcel Fabric Data Model, and/or Esri’s Local Government Information Model.
  - Online Parcel Viewer Software/App and Vendor name: ESRI Web AppBuilder (In-house)
  - Unique URL path for each parcel record: Yes
    - [https://ascent.co.green-lake.wi.us/LandRecords/PropertyListing/RealEstateTaxParcel/DetailFromParcelNumber?parcelNumber=999999999999](https://ascent.co.green-lake.wi.us/LandRecords/PropertyListing/RealEstateTaxParcel/DetailFromParcelNumber?parcelNumber=999999999999)

- **Custodian**
  - County GIS Specialist

- **Maintenance**
  - Update Frequency/Cycle: Parcel polygons are updated throughout the year to coincide with property listing

- **Standards**
  - Data Dictionary: The county Data Dictionary is in the form of a detailed Data Model graphic poster created in Microsoft Visio and exported to PDF

### Assessment/Tax Roll Data

- **Layer Status**
  - Progress toward completion/maintenance phase: NA
  - Tax Roll Software/App and Vendor name: Ascent Land Records Suite by Transcendent Technologies
  - Municipal Notes: NA

- **Custodian**
  - County Treasurer/RPL
Maintenance

- **Maintenance of the Searchable Format standard**: To maintain the Searchable Format standard, the county will utilize the export tool of our tax software.
- **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**
e.g., Permits, Easements, Non-Metallic Mining, Brownfields, Restrictive Covenants

Layer Status

- NA

**ROD Real Estate Document Indexing and Imaging**

Layer Status

- **Grantor/Grantee Index**: complete back to 1982
- **Tract Index**:
  - complete back to 1982, earlier hardcopy index is online as a digital document
  - tract indexing is PLSS-based and not parcel PIN-based
  - the county’s tract indexing encompasses deed, land contract, mortgage, certified survey map, plat, etc. documents
- **Imaging**:
  - complete back to 1935
  - indexed only by document#/volume-page between 1982 and 1935
- **ROD Software/App and Vendor Name**: Laredo/Tapestry by Fidlar

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**: vertical 19.6 cm at 95% confidence level
- **Post spacing**: 0.7 meters (density 2 points per square meter)
- **Contractor’s standard, etc.**: supports 1-ft contour interval
- **Next planned acquisition year**: 2026 (8-year period)

Custodian

- GIS Specialist

Maintenance

- 3DEP program 8-year period. The 5 year ortho projects are produced using the LiDAR data. Changes in elevation over time, such as construction, highway projects, grading, and mining may affect the accuracy of the ortho.
Standards
- 3DEP program

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.

Layer Status
- 2 ft DEM

Custodian
- GIS Specialist

Maintenance
- See LiDAR

Standards
- See LiDAR

Other Types of Elevation Data

Layer Status
- NA

Orthoimagery

Orthoimagery

Layer Status
- Most recent acquisition year: 2015
- Resolution: 4"
- Contractor’s standard: TIF
- Next planned acquisition year: 2020
- WROC participation in 2020: Confirmed participating in WROC 2020

Custodian
- GIS Specialist

Maintenance
- Update every 5 years

Standards
- Contractor

Historic Orthoimagery

Layer Status

Custodian
- GIS Specialist

Maintenance
- Archive

Standards
- Contractor

Other Types of Imagery
- e.g., Oblique Imagery, Satellite Imagery, Infra-red, etc.
**Address Points and Street Centerlines**

**Address Point Data**
Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Code of Green Lake County Chapter 217 Road Names and Building Numbers

**Building Footprints**
Layer Status
- Green Lake County does not have a Building Footprint layer

**Other Types of Address Information**
* e.g., Address Ranges
Layer Status
- See Street Centerlines

**Street Centerlines**
Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Code of Green Lake County Chapter 217 Road Names and Building Numbers

**Rights of Way**
Layer Status
- In-progress

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- DOT

**Trails**
* e.g., Recreational Trails
Layer Status
- Complete
Land Use

Current Land Use
Layer Status
• Complete

Custodian
• GIS Specialist

Maintenance
• In sync with Comp plan

Standards
• Code of Green Lake County Part III Land Use Legislation

Future Land Use
Layer Status
• Complete

Custodian
• GIS Specialist

Maintenance
• In sync with Comp plan

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.

Custodian
• GIS Specialist

Maintenance
• Ongoing

Standards
• Code of Green Lake County Part III Land Use Legislation

Shoreland Zoning
Layer Status
• The County does maintain a GIS representation of county shoreland zoning boundaries.

Custodian
• GIS Specialist
Maintenance

- Ongoing

Standards

- Code of Green Lake County Part III Land Use Legislation

**Farmland Preservation Zoning**

**Layer Status**

- The County does maintain a GIS representation of county farmland preservation zoning boundaries.
- Year of certification: Oct. 11, 2017 (updated to reflect re-zones since certification)

**Custodian**

- GIS Specialist

**Maintenance**

- Updated to reflect re-zones since certification

**Standards**

- Code of Green Lake County Part III Land Use Legislation

**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.

**Custodian**

- GIS Specialist

**Maintenance**

- Ongoing

**Standards**

- Code of Green Lake County Part III Land Use Legislation

**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**

- Extra-Territorial boundary lines

**Custodian**

- GIS Specialist

**Maintenance**

- On going

**Standards**

- Municipal

---

**Administrative Boundaries**

**Civil Division Boundaries**

- e.g., Towns, City, Villages, etc.
Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Survey Grade PLSS

**School Districts**

Layer Status
- Complete
- Parcels are dissolved based on the tax roll school district attribute. They are not based on any legal written description of the school district boundaries, nor is any such description known to exist. It is unknown how the school district attribute was originally assigned on the tax roll.
- School district name is the only attribute

Custodian
- GIS Specialist

Maintenance
- School district boundaries have never changed since modern assessment records

Standards
- Accuracy dependent on parcel mapping

**Election Boundaries**

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

Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Updated with Census

Standards
- Accuracy dependent on parcel mapping

**Utility Districts**

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

Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Transmission networks only - distribution networks maintained by utilities
Public Safety
e.g., Fire/Police Districts, Emergency Service Districts, 911 Call Center Service Areas, Public Safety Answering Points, Healthcare Facilities
Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Based on outside service agreements

Lake Districts
Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Changes are recorded with the Register of Deeds

Standards
- Based on recorded legal descriptions

Native American Lands
Layer Status
- NA

Custodian

Maintenance

Standards

Other Administrative Districts
e.g., County Forest Land, Parks/Open Space, etc.
Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Accuracy dependent on parcel mapping
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
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Based on LiDAR hydro breaklines

Cell Phone Towers

Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- Based on FCC ASR (Antenna Structure Registration)

Bridges and Culverts

Layer Status
- Complete

Custodian
- GIS Specialist

Maintenance
- Ongoing

Standards
- DOT bridges plus local data
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
County Parcel Data Workflow Diagram

Register of Deeds
- Records real estate docs including Certified Survey Maps
- Sends real estate transfer returns to the State
- Docs available for purchase online
- Fidlar software

Municipalities/Local Assessors
- Update property values

State
- DOR – Equalized assessment values, Property tax credits
- DNR – Managed Forest Lands Values

Real Property Lister
- Creates new parcels
- Maintains unique parcel ID
- Ownership changes
- Address Administrator
- Transcendent Software

Surveyor
- PLSS Public Land Survey System
- Images and Indexes Certified Survey Maps, Certificates of Survey, and tie sheets

Zoning Administrator
- General zoning
- Shoreland zoning
- Farmland Preservation
- Floodplain zoning
- Permit activity

GIS Specialist
- Maintains parcel geometries
- ESRI Software

Land Information Officer
- Submits parcel polygons + tax roll data + zoning information to DOA

Treasurer
- Generates tax bills
- Transcendent Software

DOA
- Assembles Statewide Parcel Layer from Data

Tax Bills

Sheriff Communications
- Address Ordinance
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
- Three local servers – GIS, Register of Deeds, Treasurer
- AR Sandbox for public outreach and education

Software
- ESRI ArcGIS

Website Development/Hosting
- In-house GIS mapping website
- Contracted Register of Deeds’ document access – Tapestry & Laredo
- Contracted Treasurer’s web portal – Transcendent Ascent Land Records Suite
- Contracted Zoning web portal – Transcendent Ascent Permit Management Suite

Metadata and Data Dictionary Practices

Metadata Creation
- **Metadata creation and maintenance process:** The county Data Dictionary is in the form of a detailed Data Model graphic poster created and maintained in Microsoft Visio software

Metadata Software
- **Metadata software:** ESRI ArcGIS
  - 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:** NA

Metadata Policy
- **Metadata Policy:** FGDC Standard

Municipal Data Integration Process
- The county GIS maintains parcel, address point, street centerline, and other base mapping for the municipalities. This mapping is generally distributed to the municipalities, rather than the county obtaining data from the municipalities
## Public Access and Website Information

### GIS Webmapping Application(s)

<table>
<thead>
<tr>
<th>Link - URL</th>
<th>GIS Download Link - URL</th>
<th>Real Property Lister Link - URL</th>
<th>Register of Deeds Link - URL</th>
</tr>
</thead>
<tbody>
<tr>
<td><a href="https://gis.co.green-lake.wi.us/gisweb/GIS_Viewer/">URL</a></td>
<td><a href="https://gis.co.green-lake.wi.us/gisweb/asp/DMS.aspx?dir=OpenData">URL</a></td>
<td><a href="https://ascent.co.green-lake.wi.us/LandRecords/">URL</a></td>
<td><a href="https://tapestry.fidlar.com/Tapestry2/">URL</a></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>URL</th>
</tr>
</thead>
</table>

[URL](https://gis.co.green-lake.wi.us/gisweb/gallery/)

## Data Sharing

### Data Availability to Public

**Data Sharing Policy**
- Green Lake County will provide a no-fee means of accessing land information through the websites listed above
- Public terminals for land information access are available in the Government Center
- Public internet access is also available at most public libraries
- Data in its original format is available on media with a fee to the requester for the actual cost to reproduce the data

**Open Records Compliance**
- Green Lake County complies with Wisconsin’s Open Records Law

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

**Data Sharing Restrictions**
- Green Lake County imposes no restrictions on the use or distribution of public land information

**Government-to-Government Data Sharing**
- Parcel, address, road, five year ortho updates, and LiDAR are available to municipalities within the county upon request

### Training and Education

- All county web applications display county contact phone numbers and emails for individual help using county public access web sites or interpreting the data on the websites
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.

**Project Plan for PLSS (Benchmark 4)**

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

**Project Description/Goal**

**Planned Approach**
- Contract annually as budget allows for PLSS remonumentation with survey grade GPS coordinates for all corners in the county - integrating corners into the parcel fabric will be done in-house by the GIS Specialist

**Current Status**
- **Tally of the total number of corners:** See PLSS Layer Status table in Chapter 2
- **Remonumentation status:** See PLSS Layer Status table in Chapter 2
- **Coordinate status (accuracy class) if known:** See PLSS Layer Status table in Chapter 2

**Goals**
- **Number of corners to be remonumented and/or rediscovered:** 2019/89, 2020/73, 2021/89
- **Number to have new coordinates established:** all
- **Accuracy class for these new coordinates:** Survey Grade
- **Way in which these points will be integrated into the parcel fabric:** In-house

**Missing Corner Notes**
- **Documentation for any missing corner data:** Current plan is to remonument all corners

**County Boundary Collaboration**
- The County Surveyor and Highway Commissioner will work with neighboring counties to maintain new or existing PLSS including those corners affected by Highway projects

**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.
- The public expects accurate boundary lines to display on the county map website
- Not only land owners, but realtors, assessors, appraisers, title companies, banks, and other public and private agencies make use of accurate parcel boundaries
- It would be ideal to have all areas of the county mapped to the same level of accuracy

**Objectives/Measure of Success**
- The objective is to meet Benchmark 4 (Completion and Integration of PLSS) by 2025

**Project Timeframes**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>83% of PLSS remonumented</td>
<td>1 year</td>
<td>Jan. 1 - Dec. 31, 2019</td>
</tr>
<tr>
<td>87% of PLSS remonumented</td>
<td>1 year</td>
<td>Jan. 1 - Dec. 31, 2020</td>
</tr>
<tr>
<td>90% of PLSS remonumented</td>
<td>1 year</td>
<td>Jan. 1 - Dec. 31, 2021</td>
</tr>
</tbody>
</table>

**Responsible Parties**
- Contractor
- GIS Specialist
Estimated Budget Information

- See table at the end of this chapter.

**Project #1: 2020 Orthoimagery Update**

**Project Description/Goal**

- Collect new orthoimagery every 5 years
- **Land Info Spending Category:** Orthoimagery

**Business Drivers**

- High resolution aerial imagery is used in planning, conservation, real estate activities, recreation, emergency management, and navigation
- Older images are archived as a historical record
- Regular data collection needed for temporal analysis such as change detection of land and land features
- Used to verify changes in LiDAR
- Ortho vital to Public Safety & Emergency Management, Land Use Planning & Zoning, and Land Conservation departments

**Objectives/Measure of Success**

- Project completion marked by Ortho being available for viewing online locally and by the public

**Project Timeframes**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collect spring orthos and process through the summer QC and finalize by the fall</td>
<td>9 months</td>
<td>April - Dec, 2020</td>
</tr>
</tbody>
</table>

**Responsible Parties**

- Contractor

**Estimated Budget Information**

- See table at the end of this chapter.

**Project #2: Organize Highway Plats**

**Project Description/Goal**

- Scan and index highway plats and make them available to the public over the internet
- **Land Info Spending Category:** Other Parcel Work

**Business Drivers**

- Professional Land Surveyors need access to highway plats for detailed right-of-way information
- County Surveyor & GIS need access to plats stored in the Highway shop from the Government Center at a different location
- Paper plats need an improved archival storage and retrieval system

**Objectives/Measure of Success**

- Safe long term storage of paper documents
- Proven ease of access to documents

**Project Timeframes**

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study current storage method fall of 2020 for possible 2021 project</td>
<td>9 months</td>
<td>Oct 2020 – Mar 2021</td>
</tr>
</tbody>
</table>
Responsible Parties
• Vendor for storage system hardware, In-house installation

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

Project #3: Nutrient Management Planning Software

Project Description/Goal
• Add the Nutrient Management Planning module to the Land Conservation Office’s recently acquired Farmland software
• Land Info Spending Category: Software

Business Drivers
• Integrate Owner and address information from the Treasurer’s Land Records database with the Nutrient Management Planning process
• Improve efficiency of plan lifecycle management

Objectives/Measure of Success
• Improved efficiency of planning process resulting in fewer labor hours
• Maintain or improve quality and effectiveness of planning documents
• Applying labor hours to higher priority projects

Project Timeframes

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring install of software moving into production status by fall</td>
<td>6 months</td>
<td>April - Sept, 2019</td>
</tr>
</tbody>
</table>

Responsible Parties
• Contractor

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

Project #4: Register of Deeds document software

Project Description/Goal
• Migrate from iDoc to AVID software
• Land Info Spending Category: Software

Business Drivers
• Need for improved digital recording
• Improved precision and accuracy in data entry
• Improved integration with Treasurer’s recently update software

Objectives/Measure of Success
• Improved software ease of use and added functionality for customers
• Improved integration and compatibility with other applications
• Maintain level of revenue from document fees

Project Timeframes

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spring install of software moving into production status by fall</td>
<td>12 months</td>
<td>Jan - Dec, 2021</td>
</tr>
</tbody>
</table>
Project #5: Register of Deeds document scanning

Project Description/Goal
- Continue back-archiving/digitizing of Register of Deeds’ documents
- **Land Info Spending Category:** Other Parcel Work

Business Drivers
- Saves time and money for anyone needing access to real estate documents to be able to get that access online. Reduces the need for trips to the courthouse, and frees up time of county employees for other projects

Objectives/Measure of Success
- Successfully import scans from outsourced scanning service into viewing applications

Project Timeframes

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage contract for completion over the winter</td>
<td>4 months</td>
<td>Dec 2020 – Mar 2021</td>
</tr>
</tbody>
</table>

Responsible Parties
- Contractor

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

Project #6: Education and Public Outreach

Project Description/Goal
- Develop and maintain County Land Information outreach display
- Staff and present outreach display at annual County Fair booth
- **Land Info Spending Category:** Training and Education

Business Drivers
- Educate public on land information services available
- Educate public on use of services

Objectives/Measure of Success
- High number of booth visitors
- Productive interaction with booth visitors
- Productive feedback on booth content

Project Timeframes

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Duration</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual county fair booth early August</td>
<td>repeating</td>
<td>Aug, 2019-2020-2021</td>
</tr>
</tbody>
</table>

Responsible Parties
- Land Information Officer
**Estimated Budget Information**
- See table at the end of this chapter.

---

**Project #7: Multi-function large format printer/scanner**

**Project Description/Goal**
- Replace large format printer
- **Land Info Spending Category**: Hardware

**Business Drivers**
- Nearing end of current printer production and support lifecycle
- Minimize downtime of print services due to mechanical failure

**Objectives/Measure of Success**
- Consistent large format printing with limited downtown
- Improved economy of printing

**Project Timeframes**

<table>
<thead>
<tr>
<th>Timeline – Project #7: Multi-function large format printer/scanner</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Milestone</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Begin trial program early fall and complete purchase at end of trial period</td>
</tr>
</tbody>
</table>

**Responsible Parties**
- Vendor

**Estimated Budget Information**
- See table at the end of this chapter.
## Estimated Budget Information (All Projects)

<table>
<thead>
<tr>
<th>Project Title</th>
<th>Item</th>
<th>Unit Cost/Cost</th>
<th>Land Info Plan Citations</th>
<th>Project Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Plan for PLSS (Benchmark 4)</td>
<td>90% PLSS remonumentation with survey grade GPS coordinates</td>
<td>$1,240 X 240 = $297,600 Grothman contract</td>
<td>Page 22</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Integrate PLSS with parcel mapping</td>
<td>$9,080 X 3 years = $27,240 In-house GIS Specialist</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$324,840</td>
</tr>
<tr>
<td>1) 2020 Orthoimagery Update</td>
<td>Contract WROC</td>
<td>$30,000</td>
<td>Page 23</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$30,000</td>
</tr>
<tr>
<td>2) Organize Highway Plats</td>
<td>Storage racks</td>
<td>$3,000</td>
<td>Page 23</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>In-house time</td>
<td>$2,000</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td>3) Nutrient Management Planning Software 2019</td>
<td>Contracted with Transcendent</td>
<td>$15,000</td>
<td>Page 24</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$15,000</td>
</tr>
<tr>
<td>4) Register of Deeds document software</td>
<td>Contracted with Fidlar</td>
<td>$25,000</td>
<td>Page 24</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$25,000</td>
</tr>
<tr>
<td>5) Register of Deeds document scanning</td>
<td>Contracted with Fidlar</td>
<td>$10,000</td>
<td>Page 25</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$10,000</td>
</tr>
<tr>
<td>6) Education and Public Outreach</td>
<td>Booth Displays</td>
<td>$500 x each of 3 years</td>
<td>Page 25</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$1,500</td>
</tr>
<tr>
<td>7) Multi-function large format printer/scanner</td>
<td>Contract HP</td>
<td>$5,000</td>
<td>Page 26</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$5,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>$416,340</strong></td>
</tr>
</tbody>
</table>

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