Oconto County
Land Information Plan
2019-2021
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>3</td>
</tr>
<tr>
<td>1  INTRODUCTION</td>
<td>4</td>
</tr>
<tr>
<td>2  FOUNDATIONAL ELEMENTS</td>
<td>6</td>
</tr>
<tr>
<td>PLSS</td>
<td>7</td>
</tr>
<tr>
<td>Parcel Mapping</td>
<td>8</td>
</tr>
<tr>
<td>LiDAR and Other Elevation Data</td>
<td>11</td>
</tr>
<tr>
<td>Orthoimagery</td>
<td>12</td>
</tr>
<tr>
<td>Address Points and Street Centerlines</td>
<td>13</td>
</tr>
<tr>
<td>Land Use</td>
<td>15</td>
</tr>
<tr>
<td>Zoning</td>
<td>15</td>
</tr>
<tr>
<td>Administrative Boundaries</td>
<td>17</td>
</tr>
<tr>
<td>Other Layers</td>
<td>19</td>
</tr>
<tr>
<td>3  LAND INFORMATION SYSTEM</td>
<td>21</td>
</tr>
<tr>
<td>Public Access and Website Information</td>
<td>24</td>
</tr>
<tr>
<td>4  CURRENT &amp; FUTURE PROJECTS</td>
<td>25</td>
</tr>
<tr>
<td>Project Plan to Maintain Searchable Format (Benchmarks 1 &amp; 2)</td>
<td>26</td>
</tr>
<tr>
<td>Project Plan for Parcel Completion (Benchmark 3)</td>
<td>26</td>
</tr>
<tr>
<td>Project Plan for PLSS (Benchmark 4)</td>
<td>27</td>
</tr>
<tr>
<td>Project #1: PLSS Remonumentation and Section Protractions</td>
<td>28</td>
</tr>
<tr>
<td>Project #2: LiDAR Acquisition</td>
<td>28</td>
</tr>
<tr>
<td>Project #3: Parcel Mapping Updates</td>
<td>29</td>
</tr>
<tr>
<td>Project #4: Create and/or Enhance GIS Applications</td>
<td>29</td>
</tr>
<tr>
<td>Project #5: Development and Updating of Datasets</td>
<td>29</td>
</tr>
<tr>
<td>Project #6: Support and Updates to E911 Mapping</td>
<td>30</td>
</tr>
<tr>
<td>Project #7: Orthoimagery Acquisition</td>
<td>30</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

About this Document. This land information plan for Oconto County was originally prepared and in 2018 updated by the Oconto County Planning and Zoning and the Land Information Systems Divisions of the Land and Water Resources Office; the Oconto County Land Information Officer (LIO); the Oconto County Land Information Council; and the Oconto County Land Information Planning Workgroup. This plan has been reviewed by the Wisconsin Land Information Program (WLIP) a division of the Department of Administration (DOA), approved by the Oconto County Land Information Council, and was adopted by the Oconto County Board of Supervisors on April 21, 2016 (Resolution 27-2016). The updated plan was adopted by the Oconto County Board of Supervisors on XXXXXXXXX, 2018 (Resolution XX-XXXXX).

By Wisconsin statute, “a countywide plan for land records modernization” is required for participation 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. Oconto County is eligible for WLIP grants and beginning in 2016, WLIP Strategic Initiative grants.

This plan lays out how funds from grants and retained fees will be prioritized. However, as Oconto County department 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 Oconto County. Land information is vital to Oconto County operations, as many essential services rely on accurate and up-to-date geospatial data and land records. A countywide land information system supports land use planning, economic development, emergency planning and response, and a host of other services. The Oconto 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. Oconto County strives to continually develop, enhance, and implement a modern geographic information system (GIS) that addresses land information needs and provides quality data and applications for users of land information in an equitable and efficient manner.

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>Oconto County Land Information Projects: 2019-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project #1 PLSS Remonumentation and Section Protractions</td>
</tr>
<tr>
<td>Project #2 LiDAR Acquisition</td>
</tr>
<tr>
<td>Project #3 Parcel Mapping Updates</td>
</tr>
<tr>
<td>Project #4 Create and/or enhance GIS Applications and explore the use of Mobile Applications</td>
</tr>
<tr>
<td>Project #5 Development and Updating of Datasets</td>
</tr>
<tr>
<td>Project #6 Support and Updates to E911 Mapping</td>
</tr>
<tr>
<td>Project #7 Orthoimagery Acquisition</td>
</tr>
</tbody>
</table>

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

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

**The WLIP and the Land Information Plan Requirement**

In order to participate in the WLIP, Oconto County 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 Oconto 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.

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

**County Land Information System History and Context**

Oconto County has taken the initiative to pursue a land records modernization program based on the Wisconsin Land Information Program (WLIP). As its first step, on May 17, 1990 Oconto County formed the Oconto County Land Information Office (OCLIO) (Resolution 90-45) to coordinate the Land Records Modernization Program in accordance with Wisconsin State Statutes.
**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 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 Oconto County Land Information Plan update was prepared by the Oconto County Planning and Zoning and the Land Information Divisions of the Oconto County Land & Water Resources Office; the Oconto County LIO; the Oconto County Land Information Council; and others as listed below:

<table>
<thead>
<tr>
<th>Oconto County Land Information Council and Plan Workgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
</tr>
<tr>
<td>Brian Gross</td>
</tr>
<tr>
<td>Kevin Dolata</td>
</tr>
<tr>
<td>Patrick Virtues</td>
</tr>
<tr>
<td>Annette Behringer</td>
</tr>
<tr>
<td>Tanya Peterson</td>
</tr>
<tr>
<td>Tim Magnin</td>
</tr>
<tr>
<td>Leland Rymer</td>
</tr>
<tr>
<td>Greg Sekela</td>
</tr>
<tr>
<td>Jamie Broehm</td>
</tr>
<tr>
<td>Wayne Sleeter</td>
</tr>
<tr>
<td>Kevin Hamann</td>
</tr>
<tr>
<td>Kim Pytleski</td>
</tr>
<tr>
<td>Monty Brink</td>
</tr>
<tr>
<td>Ken Dolata</td>
</tr>
<tr>
<td>Patrick Scanlan</td>
</tr>
<tr>
<td>Terri Boos</td>
</tr>
</tbody>
</table>

Land Information Council members are designated above by an asterisk. The Oconto County Land Information Council was originally created on July 22, 2010, by the Oconto County Board of Supervisors (Resolution 50-2010) in accordance with s. 59.72(3m) Wis. Stats.
2 FOUNDATIONAL ELEMENTS

Oconto County 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.
# 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>Approximately 3475</td>
</tr>
<tr>
<td>Number and percent of PLSS corners capable of being remonumented in your county that have been remonumented</td>
<td>Approximately 3278 or 94%</td>
</tr>
<tr>
<td>Number and percent of remonumented PLSS corners with survey grade coordinates</td>
<td>2597 or 75%</td>
</tr>
<tr>
<td>Number and percent of survey grade PLSS corners integrated into county digital parcel layer</td>
<td>2382 or 69%</td>
</tr>
<tr>
<td>Number and percent of non-survey grade PLSS corners integrated into county digital parcel layer</td>
<td>1093 or 31%</td>
</tr>
<tr>
<td>Tie sheets available online?</td>
<td>Yes - ftp://ocgen.co.oconto.wi.us/FTPPLSS/</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>11%</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>681</td>
</tr>
<tr>
<td>Approximate number of PLSS corners believed to be lost or obliterated</td>
<td>197</td>
</tr>
<tr>
<td>Which system(s) for corner point identification/numbering does the county employ?</td>
<td>Oconto County uses a number / letter grid system - ftp://ocgen.co.oconto.wi.us/FTPPLSS/</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>
</tbody>
</table>
| Total number of PLSS corners along each bordering county | Brown 36  
Forest 24  
Langlade 41  
Shawano 69  
Marinette 144  
Menominee 75 |
| Number and percent of PLSS corners remonumented along each county boundary | Brown 36 100%  
Forest 24 0%  
Langlade 41 0%  
Shawano 69 100%  
Marinette 144 68%  
Menominee 75 0% |
| Number and percent of remonumented PLSS corners along each county boundary with survey grade coordinates | Brown 36 100%  
Forest 0 0%  
Langlade 0 0%  
Shawano 69 100%  
Marinette 98 68%  
Menominee 21 36% |
| In what ways does your county collaborate with or plan to collaborate with neighboring counties for PLSS updates on shared county borders? | Communicate with each county and if some areas are being surveyed by others we can concentrate on other areas. We can share data between counties. |
Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As needed and in accordance with Ordinance No. 287-1996 Public Land Survey System (PLSS) Remonumentation. Continued funding will be necessary to preserve these monuments

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.
In 1994, Oconto County completed geodetic densification from stations within the Wisconsin High Accuracy Reference Network (HARN). The network consists of 27 – 1, 2 and 4 PPM stations, which were established using the “Guidelines to Support Densification of the Wisconsin High Accuracy Reference Network (HARN) using Global Positioning System (GPS) Technology” standards specifications that were current at that time, the county continually adds 10ppm stations, from its existing network. We feel there will be adequate horizontal geodetic control strategically placed throughout the County to meet our and other users’ needs. Coordinate values are available in Oconto County, State Plane and Latitude and Longitude. The County assumes the custodial responsibility for the densified control stations. We plan on using the existing NGS and USGS vertical network for vertical control. Any new stations set by the County would adhere to Third-order standards. The WISCORS (Wisconsin Continuously Operating Reference Stations) have proved to be a very useful tool and once the height modernization is completed will benefit Oconto County immensely.

Layer Status
- No County Layer as of this date, but information is available via the State Cartographers Office, Control Finder.

Custodian
- Land Information Systems a Division of the Land & Water Resources Office for County densification
- WDOT for WISCORS and Height Modernization

Maintenance
- As needed

Standards
- Guidelines to Support Densification of the Wisconsin High Accuracy Reference Network (HARN) using Global Positioning System (GPS) Technology

Parcel Mapping
Parcel Geometries
In the early 1970’s, Oconto County began developing a countywide parcel map at a scale of 1” = 200’ on 30”x36” sheets of mylar. These maps used a base map scaled from the USGS quad maps and were continually updated. In 1994, the county digitized these maps and (rubber sheeted) registered them to the
WDNR 1:24K Landnet. By the late 1990’s as complete township, surveys were completed and sections protracted by the County Surveyor, the parcels maps were again re-mapped using coordinate geometry.

**Layer Status**
- **Progress toward completion/maintenance phase:** Approximately three quarters of the county is mapped using survey grade PLSS monumentation. The remaining one quarter is referenced to the WDNR Landnet
- **Projection and coordinate system:** Transverse Mercator and WISCRS (Wisconsin Coordinate Reference Systems) as published in 2009 by the State Cartographers Office, second edition
- **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:** Geocortex Essentials or Geocortex/Esri – from contractor/vendor Ruekert-Mielke
- **Unique URL path for each parcel record:** No

**Custodian**
- Land Information Systems a Division of Land & Water Resources

**Maintenance**
- **Update Frequency/Cycle.** Parcel Mapping is continually being updated. On average the entire county gets updated bi-annually

**Standards**
- **Data Dictionary:** In human-readable form, with thorough definitions for each element/attribute name, and explanations of any county-specific notations, particularly for parcel attributes listed by s. 59.72(2)(a) will be a consideration as mapping proceeds and as funds and staffing are available

**Assessment/Tax Roll Data**

**Layer Status**
- **Progress toward completion/maintenance phase:** NA
- **Tax Roll Software/App and Vendor name:** Property Assessment & Tax Billing Module – from contractor/vendor GCS Software
- **Municipal Notes:** NA

**Custodian**
- Land Information Systems a Division of the Land & Water Resources Office

**Maintenance**
- **Maintenance of the Searchable Format standard:** To maintain the Searchable Format standard, the county will continue to update parcel mapping and utilize 3rd party vendors when needed to ensure parcel data is created and maintained in the searchable format
- **Searchable Format Workflow:** The County maintains parcel/tax roll data in such a way that requires significant formatting every year—whether by the county staff in-house, or a third-party contractor/vendor.

**Standards**
- Wisconsin Department of Revenue Property Assessment Manual and attendant DOR standards
- DOR XML format standard requested by DOR for assessment/tax roll data
- s. 59.72(2)(a), Wis. Stats. Presence of all nine “Act 20” attributes
- s. 59.72(2)(a), Wis. Stats. Crosswalk of attributes
<table>
<thead>
<tr>
<th>Act 20 Attributes Required by s. 59.72(2)(a)</th>
<th>Field Name(s) in County Land Info System</th>
<th>Notes on Data or Exceptions to DOR Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessed value of land</td>
<td>LNDVALUE</td>
<td></td>
</tr>
<tr>
<td>Assessed value of improvements</td>
<td>IMPVALUE</td>
<td></td>
</tr>
<tr>
<td>Total assessed value</td>
<td>CNTASSDVALUE</td>
<td></td>
</tr>
<tr>
<td>Class of property, as specified in s. 70.32 (2)(a)</td>
<td>PROPCCLASS</td>
<td></td>
</tr>
<tr>
<td>Estimated fair market value</td>
<td>ESTFMKVALUE</td>
<td></td>
</tr>
<tr>
<td>Total property tax</td>
<td>GRSPRPTA</td>
<td></td>
</tr>
<tr>
<td>Any zoning information maintained by the county</td>
<td>PSTLADDRESS SITEADDRESS ADDNUMPREFIX ADDNUM ADDNAMSUFFIX PREFIX STREETNAME STREETTYPE SUFFIX LANDMARKNAME UNITTYPE UNITID</td>
<td>This information is stored in a separate database. Zoning information is not required in DOR schema.</td>
</tr>
<tr>
<td>Any property address information maintained by the county</td>
<td>DEEDACRES ASSDACRES GISACRES</td>
<td>Acreage based on the legal description. Acreage based on the assessment data. Acreage based on GIS data.</td>
</tr>
</tbody>
</table>

Non-Assessment/Tax Information Tied to Parcels

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

Layer Status
- Permits (Land Use, Conditional Use, Sanitary, Shoreland, Floodplain, Non-Metallic, etc.)
- Farmland Preservation
- Active Non-Metallic Mining Sites
- Structure Points
- Building Footprints
- LOMA/LOMR Locations

Custodian
- Planning and Zoning a Division of Land & Water Resources

Maintenance
- Permits are continuously maintained with other data sets being updated annually

Standards
- Mapped using best available parcel mapping and orthophotography

ROD Real Estate Document Indexing and Imaging

Layer Status
- **Grantor/Grantee Index:** The index from 2000 to present is in digital format. From 1985 to 1999, is in hard copy printout format. Prior to 1985, the index is hand written, in bound books. Currently, we have indexing work being provided by an outside resource for documents recorded from 09/01/1978 to 2000. Adding recording date and time, recording information, document type, instrument date, page count, loan amount where applicable, grantor/grantee name, and legal description to documents that have been imported into the current LandShark/LandLink indexing program.
• **Tract Index:** The tract index follows the same course as the Grantor/Grantee Index. From 2000 to the present, this index is part of the same index as Grantor/Grantee. Prior to 2000, the index is kept in large bound books, separated into quarter/quarter or government lots, section, township, range, or by lot and block in plat/subdivisions. (The current system is tractable by Certified Survey Map, as well.) It is not Parcel PIN-Based or PLSS-Based. All documents containing a legal description are posted to the Tract Index system. The paper index requires continuous maintenance, as it is daily used by the public and office staff causing necessary regular repair and preservation. This paper index has been scanned by an outside source, and computerized access options are being pursued.

• **Imaging:** Documents have now been scanned back to 1838, however, with priority of other projects, our Technology Services Department has not been able to advance with the importing of the newly scanned images. The documents scanned back to 04/19/1960 to 09/01/1978, have been made available to office staff for retrieval on our computerized system, LandLink. Images from 09/01/1978 to 2000, are available for outside users for retrieval by document number and volume & page. From 2000 to the present, images are available and accessible to all internal and outside record users, providing convenience to all record users. Currently, an outside company is working on completing the indexing of Grantor/Grantee and Tract Index back to 09/01/1978. It is the intention of this office to continue the indexing of the documents recorded prior to 09/01/1978. This will be an ongoing project, providing ease in locating the records by more than document number, volume and page, as is provided by the scanning vendor. As scanned images are imported into the indexing system, record users will be able to access these records, freeing up office staff to work on indexing of the records prior to 09/01/1978. As funding is allowed, options will be pursued to continue working on this indexing project.

• **ROD Software/App and Vendor Name:** Landshark – from contractor/vendor Trimin. There is a $5 credit card convenience fee per session, a session is considered a purchase up to $50. Standard fees of $2 for first page and $1 for each additional page apply. A monthly subscription fee ranging from $275 - $550 depending on the number of images downloaded.

**Custodian**
- County Register of Deeds

**Maintenance**
- As Needed

**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:** In 2005, Oconto County purchased a county wide LiDAR data set. In 2010, through a American Recovery and Reinvestment Act Grant, new lidar data was developed for the areas of the USH 41 bypass of the City of Oconto and for the USH 141 bypass of the Village of Lena.
- **Next planned acquisition year:** 2019 – contingent on available funding

**Custodian**
- Land Information Systems a Division of Land & Water Resources

**Maintenance**
- The present LiDAR will be maintained as is until new data is obtained. Any new LiDAR data will be maintained as an independent data set
Standards

- Conduct a Light Detection and Ranging (LiDAR) acquisition flight. The raw LiDAR data density (posting) will be approximately 3-meters. Total coverage of County is 1020 square miles or 653,070 square acres
- Post process the raw LiDAR data to remove LiDAR data which define vegetative canopy, undergrowth, buildings, and other above bare earth features. Final processed file will contain bare earth X, Y and Z values at an approximate density (posting) 5-meters (Digital Elevation Model)
- Integrate 3-dimensional breaklines into the bare earth data grid to create a Digital Terrain Model (DTM)
- Interpolate 2-foot contours from the DTM
- All map products will meet ASPRS Class II accuracy standards. Deliverable items will include a countywide DTM (Oconto County Coordinates horizontal) (vertical reference datum (NAVD88), contour vector files in AutoCAD format, and FGDC compliant metadata for all digital files in MSWord and XML format

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-foot contour vector files
- Integrate 3-dimentional breaklines into the bare earth data grid to create a Digital Terrain Model (DTM)

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- This data set will remain as is. When new data is obtained the data sets will still remain independent

Standards
- All map products will meet ASPRS Class II accuracy standards

Other Types of Elevation Data

Layer Status
- NA

Custodian
- NA

Maintenance
- NA

Standards
- NA

Orthoimagery

Orthoimagery

Layer Status
- Most recent acquisition year: 2018
- Resolution: 6” Color
- Contractor’s standard: targeted for ASPRS Class II Specifications
- Next planned acquisition year: 2021 - contingent on available funding
- WROC participation in 2020: Will not participate

Custodian
- Land Information Systems a Division of Land & Water Resources
Maintenance
- This data remains as delivered

Standards
- Imagery will need to meet or exceed specified standards

**Historic Orthoimagery**

**Layer Status**
- 1938 (hard copy imagery of the county forest)
- 1973 (hard copy imagery of the county forest)
- 1988 (hard copy imagery of the county forest)
- 1998 county wide (3m b/w) NAPP Digital Orthophotography
- 2004 county wide (12” b/w) ASPRS standard for Class III horizontal map accuracy
- 2004 city of Oconto (6” b/w) ASPRS standard for Class III horizontal map accuracy
- 2010 county wide (12” color) National Map Accuracy Standards for 1”=200’ scale mapping
- 2014 county wide (6” color) targeted for ASPRS Class I Specifications

**Custodian**
- For the 1938 – 1988 - Forestry and Parks a Division of Land & Water Resources
- For all other imagery - Land Information Systems a Division of Land & Water Resources

**Maintenance**
- This data remains as delivered

**Standards**
- Varies

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

**Layer Status**
- Oconto County obtained four-band color IR in the 2014 and 2018 ortho acquisition

**Custodian**
- Land Information Systems a Division of Land & Water Resources

**Maintenance**
- This data remains as delivered

**Standards**
- ASPRS Class I Specifications

---

**Address Points and Street Centerlines**

**Address Point Data**

**Layer Status**
- County wide

**Custodian**
- Land Information Systems a Division of Land & Water Resources
- Planning and Zoning a Division of Land & Water Resources

**Maintenance**
- Physical address applications will be used annually to assign new points. New data points placed after most recent orthophotography will be reviewed after new orthophotography is obtained

**Standards**
- No Recognized Standard. Data was developed using most recent orthophotography to place points on the centerline of the driveway at the right-of-way
Building Footprints
Layer Status
- Oconto County acquired county wide footprint data with the 2014 ortho acquisition

Custodian
- Land Information Systems a Division of Land & Water Resources
- Planning and Zoning a Division of Land & Water Resources

Maintenance
- This data will remain as delivered
- Any additional building footprint data will be maintained in a new data set that maintains same fields

Standards
- Complied from 2014 aerial imagery
- County wide 10’ x 10’ structures or larger
- Map scale 1” = 100’
- Additional verification from 2005 LiDAR
- Survey data obtained
- Post initial delivery building footprint data will be created using most recent orthophotography and survey data when available

Other Types of Address Information
e.g., Address Ranges
Layer Status
- Oconto County has developed address ranges for the E911 software Spillman, these are continually reviewed and updated as roads are created and expanded

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As needed. Ranges are expanded and apportioned as development occurs, in addition there is occasional requests from Entrodo for verification and confirmation

Standards
- No Recognized Standard. (Data was developed using most recent orthophotography)

Street Centerlines
Layer Status
- County wide at various levels of accuracy

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- Continually updating new roads, public and private. Land Information Systems policy allows for centerlines to vary within 3 feet where discrepancies occur

Standards
- Centerline attributes identify the type of road; local, county, state, federal and private

Rights of Way
Layer Status
- County wide at various levels of accuracy

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As needed
Standards
• Using surveys, right of way plats and legal descriptions

Trails
e.g., Recreational Trails
Layer Status
• County wide at various levels of accuracy

Custodian
• Forestry and Parks a Division of Land & Water Resources
• Land Information Systems a Division of Land & Water Resources
• Planning and Zoning a Division of Land & Water Resources

Maintenance
• As needed

Standards
• Trail information is obtained using mapping grade GPS or using most recent orthophotography

Land Use
Current Land Use
Layer Status
• County wide (2006) – Partial update in 2017

Custodian
• Planning and Zoning a Division of Land & Water Resources

Maintenance
• Maintain as delivered and update as part of Comprehensive Plan updates

Standards
• Created from a windshield survey and using most recent orthophotography

Future Land Use
Layer Status
• County wide

Custodian
• Planning and Zoning a Division of Land & Water Resources

Maintenance
• Maintain as delivered or as planning amendments are made

Standards
• s. 66.1001, Wis. Stats. Comprehensive planning. Future land use maps are typically created through a community’s comprehensive planning process. Future land use mapping for a county may be a patchwork of maps from comprehensive plans adopted by municipalities and the county

Zoning
County General Zoning
Layer Status
• The County does maintain a GIS representation of county general zoning boundaries in all 23 towns

Custodian
• Land Information Systems a Division of Land & Water Resources
• Planning and Zoning a Division of Land & Water Resources
Maintenance
• As needed

Standards
• Created based on parcel boundaries

**Shoreland Zoning**

Layer Status
• Administered by county but not in GIS format.

Custodian
• NA

Maintenance
• NA

Standards
• NA

**Farmland Preservation Zoning**

Layer Status
• Not administered by county.

Custodian
• NA

Maintenance
• NA

Standards
• 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

Custodian
• Land Information Systems a Division of Land & Water Resources
  • Planning and Zoning a Division of Land & Water Resources

Maintenance
• As needed

Standards
• FEMA mapping standards

**Airport Protection**

Layer Status
• The County does maintain a GIS representation of airport protection zoning boundaries
  • **Airport protection zoning map depicts**: Height limitation restrictions

Custodian
• Land Information Systems a Division of Land & Water Resources
  • Planning and Zoning a Division of Land & Water Resources

Maintenance
• As needed

Standards
• Created based on a buffer from the center point of the airport
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
- City of Oconto (General Zoning)
- Village of Lena (General Zoning)
- Village of Suring (General Zoning)

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As needed

Standards
- Created based on parcel boundaries

Administrative Boundaries

Civil Division Boundaries

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

Layer Status
- County wide (23 townships, 3 cities, and 3 villages)

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As Needed

Standards
- Created based on parcel boundaries

School Districts

Layer Status
- County wide
- Parcel data has attribute field with school district code

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As needed

Standards
- DOR classification codes

Election Boundaries

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

Layer Status
- County wide

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As needed (required every 10 years after census completed)

Standards
- DOR classification codes
Utility Districts
  e.g., Water, Sanitary, Electric, etc.
Layer Status
  • County wide (sanitary sewer)
Custodian
  • Land Information Systems a Division of Land & Water Resources
Maintenance
  • As needed
Standards
  • DOR classification codes

Public Safety
  e.g., Fire/Police Districts, Emergency Service Districts, 911 Call Center Service Areas, Public Safety Answering Points, Healthcare Facilities
Layer Status
  • County wide (fire, police, and ambulance service districts)
Custodian
  • Land Information Systems a Division of Land & Water Resources
Maintenance
  • As needed (working with service providers and municipalities)
Standards
  • Agreed boundaries (town, parcel, road etc.)

Lake Districts
Layer Status
  • County wide
Custodian
  • Land Information Systems a Division of Land & Water Resources
Maintenance
  • As needed
Standards
  • DOR classification codes

Native American Lands
Layer Status
  • NA
Custodian
  • NA
Maintenance
  • NA
Standards
  • NA

Other Administrative Districts
  e.g., County Forest Land, Parks/Open Space, etc.
Layer Status
  • County wide (county forest)
Custodian
- Land Information Systems a Division of Land & Water Resources
- Forestry and Parks a Division of Land & Water Resources

Maintenance
- As needed

Standards
- Mapped based on parcel ownership

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
- County wide (lakes, rivers, streams)

Custodian
- Land Information Systems a Division of Land & Water Resources

Maintenance
- As parcel mapping is completed

Standards
- Using parcel mapping and most recent orthophotography

Cell Phone Towers
Layer Status
- NA

Custodian
- NA

Maintenance
- NA

Standards
- NA

Bridges and Culverts
Layer Status
- NA

Custodian
- NA

Maintenance
- NA

Standards
- NA

Other
e.g., Pipelines, Railroads, Non-Metallic Mining, Sinkholes, Manure Storage Facilities, etc.
Layer Status
- County wide (non-metallic mining sites, sanitary lagoons)

Custodian
- Planning and Zoning a Division of Land & Water Resources
Maintenance
  • As needed

Standards
  • Using parcel data and most recent ortho photography
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
- Sends real estate transfer returns to the State
- Codes docs in Land Shark
- Creates grantor/grantee and tract indices in Land Shark

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 in tax database in GCS
- Assigns unique parcel ID
- Finalizes Tax Roll
- Prints and mails property owner tax bills from GCS

Surveyor
- PLSS and other geodetic control

Principal Planner
- Maintains Planning and Zoning related datasets

GIS Coordinator
- Maintains parcel geometries in ARCGIS 10.4

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

DOA
- Assembles Statewide Parcel Layer from Data

Treasurer
- Receives Tax Payments
- Tax Deeds

Tax Bills
Technology Architecture and Database Design

Oconto County’s land information system utilizes a number of programs and software applications to process, track, and access records. Oconto County’s land information system runs on the county network and is supported by the Oconto County Technology Services (TS) Department.

Hardware
- ArcGIS Server: HP Proliant DL 380 64 bit with 64 GB RAM. Intel Xeon 2.6 Ghz processors
- Web Adapter server: Hardware used is an HP ProLiant DL380 Server 64 bit, 8 GB of RAM

Software
- ArcGIS Server: Windows Server 2012R2, ArcGIS software. Web Site was developed by Reukert Mielke. Spillman mobile & geobase also runs on server
- Web Adapter server: Windows Server 2012R2, ArcGIS web adapter

Website Development/Hosting
- ArcGIS Server: Server website was developed by Reukert Mielke. Server is hosted on Oconto County network.
- Web Adapter Server: Server gateway name is OCVMSOLOWA. Server is hosted on Oconto County DMZ network

Metadata and Data Dictionary Practices

Metadata Creation
- Metadata creation and maintenance process: Oconto County has metadata on a limited number of datasets. A policy on consistent metadata creation and maintenance does not exist at this time.

Metadata Software
- Metadata software: When metadata is created ArcCatalog is utilized.
  - 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: Oconto County has not identified metadata tools or a policy for maintaining a minimum metadata requirement.

Municipal Data Integration Process
- Currently no municipalities within Oconto County are creating data that is being integrated into the county land information system.
Public Access and Website Information

Public Access and Website Information (URLs)

<table>
<thead>
<tr>
<th>GIS Webmapping Application(s)</th>
<th>GIS Download Link - URL</th>
<th>Real Property Lister Link - URL</th>
<th>Register of Deeds Link - URL</th>
</tr>
</thead>
</table>

Land Records/ Land Information Office Link - URL
https://www.co.oconto.wi.us/departments/page_8c9f07d91527/?department=61b6927f4e22&subdepartment=aead61156004

Data Sharing

Data Availability to Public

Data Sharing Policy
- Oconto County’s will share all data available

Open Records Compliance
- Oconto follows all open records requirements for data sharing.

Data Sharing Restrictions and Government-to-Government Data Sharing

Data Sharing Restrictions
- Oconto County does not restrict data sharing with anyone requesting county held data. The county does forbid recipients of county data to redistribute the data.

Government-to-Government Data Sharing
- Oconto County with other government agencies as needed.

Training and Education
- The Oconto County Land Information Division has and will continue to provide funding as available for county staff to attend the WLIA annual conference, EWUG meetings, and other necessary and applicable trainings.
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 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
- Oconto County will strive to maintain data in the searchable format as outlined in Benchmark 1 and 2.

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.
- Oconto County Land Information staff will be coordinating with GCS to ensure parcel record attributes align with the required state format.

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).

Project Timeframes
- Ongoing to ensure data remains consistent with the state required format

Responsible Parties
- Oconto County Land Information Division staff will be maintaining the data in the searchable format

Estimated Budget Information
- This will involve multiple county staff devoting time to the project in addition to any costs to have GCS update current programs.

Project Plan for Parcel Completion (Benchmark 3)

Project Title: Project Plan for Parcel Completion (Benchmark 3)

Project Description/Goal
Current status of parcel data
- **Current status of parcel data in the county:** Oconto County currently has all parcels mapped and maintains on a quarterly basis. Of the twenty-three townships in Oconto County, parcel data has been updated in nineteen of twenty-three towns using survey grade PLSS monumentation. Parcel data in the three cities and three villages within Oconto County have been mapped using survey grade PLSS monumentation.
- **Tally of the total number of parcels in digital format:** Approximately 41,500
- **Estimated number of parcels yet to be digitized:** NA

Goals
- **Number of parcels to be added for the grant project period(s):** Oconto County will continue to work toward updating the parcel data in the remaining 4 townships using survey grade PLSS monumentation. Completion of updates in one township per year is anticipated.

Planned approach
- Oconto County will work toward adopting ESRI’s parcel fabric system once the remaining town parcel mapping is updated using survey grade PLSS monumentation. The county will continue to focus on remonumentation in an effort to complete the parcel mapping updates.

Business Drivers
- The Project Plan for Parcel Completion is a requirement for those counties who utilize Strategic Initiative funds for work related to digital parcel map completion.
- The county will work toward updating remaining townships using survey grade PLSS monumentation. The users of county GIS applications rely on accurate parcel mapping.
Objectives/Measure of Success
- The objective is to continue to update parcel mapping accuracy in the remaining 4 of 23 towns using survey grade PLSS monumentation

Project Timeframes
- Oconto County will maintain parcel data set and update remaining township (5 of 23) parcel data using survey grade PLSS monumentation over the next five years

Responsible Parties
- Oconto County Land Information Division staff will be coordinating the conversion of data into the new state format

Estimated Budget Information
- This work will involve various staff

Project Plan for PLSS (Benchmark 4)

Project Title: Project Plan for PLSS (Benchmark 4)

Project Description/Goal

Planned Approach
- Oconto County planned approach for remonumenting, rediscovering, and establishing survey-grade coordinates for PLSS corners, and integrating corners into the parcel fabric. Due to cost, accessibility, or land ownership, lower-quality coordinates may be substituted. However, lower grade coordinates should be the exception, rather than the rule. In addition, counties may (but are not required to) use Strategic Initiative grant funds to upgrade their PLSS from a NAD 27 coordinate system to a more current datum.

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: 18 planned in Towns of Breed and Bagley
- Number to have new coordinates established: Attempt minimum of 60 per year
- Accuracy class for these new coordinates: Survey grade
- Way in which these points will be integrated into the parcel fabric: Remap the entire town using updated section breakdowns

Missing Corner Notes
- Documentation for any missing corner data: Oconto County will document any missing corner data. Many of the missing corners in Oconto County are located within public lands; these will be lower on the priority list for remonumentation. (Often these will be justifiable exclusions, such as meander corners, corners on public forest land, etc.)

County Boundary Collaboration
- Oconto County will continue to collaborate with and share section corner information with neighboring counties. (Brown, Forest, Langlade, Shawano, Marinette, and Menominee Counties).

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.

Objectives/Measure of Success
- The objective is to meet Benchmark 4 (Completion and Integration of PLSS)
Project Timeframes
- At a rate of 60 corners per year it will take approximately 16 years to complete remonumentation with survey grade coordinates. Oconto County will work to increase the number of corners remonumented as budgets permit and/or staff are available. Oconto County will also try to prioritize remonumentation to areas that provide the most benefit.

Responsible Parties
- Oconto County Land Information staff will coordinate inventorying PLSS data, contracting work, and incorporating survey control.

Estimated Budget Information
- This work will involve various staff and at times and as budgets permit some contracted services.

---

**Project #1: PLSS Remonumentation and Section Protractions**

**Project Description/Goal**
- Of the approximately 3,475 PLSS corners in Oconto County, approximately 2,597 have been remonumented with survey grade coordinates. Of these approximately 140 are located along the county boundary. Oconto County will work toward remonumenting the remaining PLSS corners. This will allow for updating of parcel mapping and a more accurate product.
- **Land Info Spending Category**: PLSS (also affects Parcel Mapping, and Other Layers)

**Business Drivers**
- This project will allow for continued parcel mapping updates and therefore more accurate data for GIS users.

**Objectives/Measure of Success**
- The Land Information Division will work toward continued remonumentation until all PLSS corners are survey grade. Remonumentation of county boundary corners and current areas of parcel mapping updates will be the priority.

**Project Timeframes**
- Oconto County will work toward remonumenting a minimum of 60 PLSS corners per year.

**Responsible Parties**
- Oconto County Land Information Division. Primary staff for this project will be the Oconto County Professional Land Surveyor and/or a contracted Professional Land Surveyor.

**Estimated Budget Information**
- $15,000 / year until complete ($45,000 for the three years of this plan)

---

**Project #2: LiDAR Acquisition**

**Project Description/Goal**
- Oconto County acquired LiDAR in 2005 and is looking to update this valuable data set.
- **Land Info Spending Category**: LiDAR

**Business Drivers**
- This project will allow for new LiDAR data to be available for county departments, land owners, etc. The 2005 data has proven to be very valuable and the new technologies and LiDAR data will only enhance this benefit.

**Objectives/Measure of Success**
- To acquire LiDAR data at a reasonable cost to Oconto County

**Project Timeframes**
- Oconto County will look to acquire LiDAR in 2020 or as funding is available.
Responsible Parties
- Oconto County Land Information Division will contract with vendors to acquire this data

Estimated Budget Information
- $150,000

**Project #3: Parcel Mapping Updates**

**Project Description/Goal**
- To continue updating parcel mapping using survey grade PLSS monumentation. Currently Oconto County has approximately four of twenty-three towns that have yet to be updated using survey grade PLSS monumentation.
- **Land Info Spending Category:** Digital Parcel Mapping

**Business Drivers**
- Updated parcel mapping will provide more accurate information for all GIS users

**Objectives/Measure of Success**
- All parcel mapping completed using survey grade PLSS monumentation

**Project Timeframes**
- Oconto County plan to update one town per year until all four remaining towns have updated parcel data

**Responsible Parties**
- Oconto County Land Information Division

**Estimated Budget Information**
- $200,000 (50,000 per year for 4 years)

**Project #4: Create and/or Enhance GIS Applications**

**Project Description/Goal**
- Continue to update and enhance the public GIS viewer in addition to developing other applications to address specific GIS user needs
- **Land Info Spending Category:** Website Development / Hosting Service

**Business Drivers**
- Growing use of web based GIS applications

**Objectives/Measure of Success**
- Oconto County will continue to strive to have GIS applications available that meet the needs of the GIS users

**Project Timeframes**
- Ongoing and as needs arise

**Responsible Parties**
- Oconto County Land Information and the Planning and Zoning Divisions

**Estimated Budget Information**
- $2,500 annually

**Project #5: Development and Updating of Datasets**

**Project Description/Goal**
- As parcel mapping updates continue and as the accuracy improves it will be imperative that Oconto County update existing datasets using the improved accuracy as well as create new datasets that address GIS user needs
- **Land Info Spending Category:** Other (additional parcel related data sets)
Business Drivers
- Growing use of web based GIS applications

Objectives/Measure of Success
- Oconto County will continue to strive to have GIS applications available that meet the needs of the users

Project Timeframes
- Ongoing and as needs arise

Responsible Parties
- Oconto County Land Information and the Planning and Zoning Divisions

Estimated Budget Information
- $2,500 annually

Project #6: Support and Updates to E911 Mapping

Project Description/Goal
- Continue to update and enhance the E911 system
- Land Info Spending Category: Other (E911 mapping)

Business Drivers
- Continued need for accurate E911 data and applications

Objectives/Measure of Success
- Oconto County will continue to strive to have GIS applications available that meet the needs of the users

Project Timeframes
- Ongoing and as needs arise

Responsible Parties
- Oconto County Land Information Division

Estimated Budget Information
- $5,000 annually

Project #7: Orthoimagery Acquisition

Project Description/Goal
- Continue to plan and budget for new orthoimagery acquisition on a 3 to 5 year cycle
- Land Info Spending Category: Orthoimagery

Business Drivers
- Updated Orthoimagery for the development of GIS datasets in addition to the use by numerous county department and other users

Objectives/Measure of Success
- Oconto County will budget annually in order to continue with the acquisition cycle

Project Timeframes
- On a three to five year cycle (last acquisition was May 2018)

Responsible Parties
- Oconto County Land Information Division

Estimated Budget Information
- $20,000 annually
## 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>1) PLSS Remonumentation and Section Protractions</td>
<td>County and/or Contracted</td>
<td>$15,000 / yr</td>
<td>Page 28</td>
<td>45,000</td>
</tr>
<tr>
<td></td>
<td>Professional Surveyor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2) LiDAR Acquisition</td>
<td>LIDAR Data</td>
<td>$150,000</td>
<td>Page 28</td>
<td>150,000</td>
</tr>
<tr>
<td>3) Parcel Mapping Updates</td>
<td>GIS Specialist Position</td>
<td>$50,000</td>
<td>Page 29</td>
<td>150,000</td>
</tr>
<tr>
<td>4) Create and/or enhance GIS Applications</td>
<td>GIS Staff / Vendor</td>
<td>$2,500</td>
<td>Page 29</td>
<td>2,500</td>
</tr>
<tr>
<td>5) Development and Updating of Datasets</td>
<td>GIS Staff</td>
<td>$2,500</td>
<td>Page 30</td>
<td>2,500</td>
</tr>
<tr>
<td>6) Support and Updates to E911 Mapping</td>
<td>GIS Staff / Vendor</td>
<td>$2500</td>
<td>Page 30</td>
<td>2,500</td>
</tr>
<tr>
<td>7) Orthoimagery Acquisition</td>
<td>Orthoimagery</td>
<td>$20,000 / yr</td>
<td>Page 30</td>
<td>60,000</td>
</tr>
</tbody>
</table>

**GRAND TOTAL** 412,500

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