

Oneida County Land Information Plan 2022-2024



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Version: 2021-12-10

Approved/Adopted by Land Information Council on: 12-07-2021

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EXECUTIVE SUMMARY

About this Document. This document is a land information plan for Oneida County prepared by the land information officer (LIO) and the Oneida 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 2020, Oneida County was awarded \$54,368 in WLIP grants and retained a total of \$110,712 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. **Therefore, projects listed here and in Section 4 are subject to available funding and does not obligate the county.**

Land Information in Oneida County. Land information is central to Oneida County operations, as many essential services rely on accurate and up-to-date geospatial data and land records. A countywide land information system supports all land related county departments, Real property, County Surveyor, Planning & Zoning, Land Conservations, Forestry, Sheriff’s Department 911 and NewWorld dispatch system, economic development, emergency planning and response, and provides geospatial information to the local municipalities, the public and a host of other citizen services. The Oneida 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 some rights attributable to landowners. Oneida County has strived for reduction in duplicative datasets, creates consistent databases, and whenever possible shares data and integrates datasets across department.

Mission of the Land Information Office. In the next three years, Oneida County’s Land Information Office wants to ensure compliance with the DOA Benchmark submissions; to be recognized for its exceptional web mapping site, increase gains in governmental efficiencies by broadening the utilization of GIS, improve the parcel mapping accuracy, and to be responsive to meeting the land records needs of residents, the public, landowners 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 and others in Section 4 **subject to funding:**

Oneida County Land Information Projects: 2022-2024	
A	Replace the Sanitary and Zoning permit software application
B	Work toward completion of PLSS remonumentation, DOA Benchmark 4
C	Maintaining the existing GIS feature classes with emphasis on parcel data set
D	Acquire countywide aerial imagery and/or LIDAR datasets
E	Update the web mapping application
F	Update and maintain the licensing of the various land records software

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

1 INTRODUCTION

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

The WLIP and the Land Information Plan Requirement

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

- Update the county's land information plan at least every three years
- Meet with the county land information council to review expenditures, policies, and priorities of the land information office at least once per year
- Report on expenditure activities each year
- Submit detailed applications for WLIP grants
- Complete the annual WLIP survey
- Subscribe to DOA's land information listserv
- Coordinate the sharing of parcel/tax roll data with the Department of Administration in a searchable format determined by DOA under s. 59.72(2)(a)

LAND INFORMATION

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

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

– Wis. Stats. section 59.72(1)(a)

Any grants received and fees retained for land information through the WLIP must be spent consistent with the county land information plan. Oneida County has met the requirements of the WLIP since 1989 and has benefited significantly from the program. Oneida County typically uses the retained fees to pay maintenance costs for our larger land records hardware/software systems, and also saves up moneys for projects requiring large expenditures. However, the maintenance/licensing fees of the land records systems in the Land Information Office, Planning & Zoning, Treasurer and Register of Deeds is now consuming all of the annual fees collected so the offices will need to rely more on capital improvement funds from the county for larger land records projects in the future.

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 and PLSS completion.

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 2016-2021 Grant Years)

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

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

County Land Information System History and Context

Below is a brief outline of major modernization efforts that Oneida County achieved since the beginning of the Wisconsin Land Information Program in 1989. While not mentioned below, each year ongoing maintenance of data bases and related maps have been taking place.

1989	County Acquired first county wide leaf off photography, film based
1990	Created Land Information office
1991	Created WLIP Land Modernization Plan, started work on a digital base map; participated in LOCALIS state work group, assisted with re-districting
1992	Obtained first WLIP grant to create and complete a digital base map
1993	Start using GPS on PLSS, GPS and maintenance of basemap data continues each year
1994	Implemented a countywide change to the real property listing/tax billing process and created an integrated parcel database
1995	Continue GPS – real property listing, parcel splits etc
1996	Completed a digital soils layer
1997	WLIP address mapping grant to create an address point layer; Implemented E911
1998	Implemented ROD Imaging and an electronic tract index system
1999	Ensured land records systems were Y2K compliant; updated basemap info
2000	Changed from a town based assignment of addresses to a countywide addressing and road naming process; assisted with redistricting; launched 'Parcel Vantage' a parcel viewer on Intranet
2001	Scanned ROD plats and CSM's
2002	Scanned all county survey maps and PLSS forms
2003	Began the first countywide parcel mapping project – ended in 2009; back scanned deeds of current tax parcels.
2004	Implement a Web mapping application; included tax data in searchable form including names on Internet
2005	Converted to Geodatabase; acquired first ever 'Color' countywide leaf off Digital ortho photography
2006	Merged the Real Property Listers office with the Land Information Office
2007	Converted GIS dataset to ArcSDE, Geodatabase
2008	Land Information Office assigned the duties for sales of tax foreclosed and County owned Real Estate Transactions
2009	Completed Generation 1 of the countywide parcel mapping, maintenance continues
2010	Created an Internet site to access our survey and other static maps, acquired color digital ortho, Assisted with Comp Planning
2011	Assist with Redistricting and creation of Nokomis Lake District
2012	Revised snowmobile trails and linked parcels to snowmobile use agreements, Develop a LiDAR contract
2013	Began LiDAR project, ROD migration to new system
2014	AIS mapping; Completed Lidar project, ROD redaction project completed
2015	GIS Server and ArcGIS upgrades, new color digital photography, new mapping apps, completed ROD document scanning back to 1887

2016	186 PLSS corners were remonumented and/or geodetically positioned, Assisted with Squash Lake District formation, launched new advanced web mapping One-View, implemented ROD e-recording, scanned historic survey notes
2017	Updated snowmobile trails, created trail app, back scanned sanitary permits, 240 PLSS corners were remonumented, ROD web access to documents
2018	Implemented a new highly integrated easy to use web tax, permit, deed and map application, started process to move land records off AS400, implemented ROD credit card purchase for documents
2019	Acquire new countywide digital imagery, ROD implemented WCI, a new document management system, selected vendor for a new Real property – tax application system, highway sign inventory.
2020	Implement the new Real Property – Tax Application system, updated the plainimetric mapping from 2019 imagery and impervious surfaces, assisted with COVID response plan and mapping application.
2021	Updated GIS servers and ArcSDE environment, update GIS environment for Sheriff Department NewWorld CAD application

County Land Information Plan Process

- DOA release of finalized instructions by March 31, 2021.
- April–September 2021: Counties work on land info plans.
- Draft plans due to DOA by September 30, 2021 (but sooner is advised).
- Final plans with county land info council approval due by December 31st, 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.

Oneida County Land Information Council and Plan Workgroup				
Name	Title	Affiliation	Email	Phone
+ Michael Romportl	Land Information Director Land Information Officer County Surveyor	Land Information	mromportl@co.oneida.wi.us	715-369-6179
+ Tara Ostermann	County Surveyor County Treasurer	Treasurer	tostermann@co.oneida.wi.us	715-369-6137
+ Sara Jewell	Real Property Lister Assessment Coordinator	Land Information	sjewell@co.oneida.wi.us	715-369-6179
+ Sonny Paszak	County Board Member	County Supervisor	None	715-369-4835
+ Kyle Franson	Register of Deeds	Register of Deeds	kfranson@co.oneida.wi.us	715-369-6150
+ Ted Cushing	Realtor	Realtor	Ted@vacationlandproperties.com	715-356-5887

+ Ken Kortenhof	Public Safety Officer	Sheriff Department Emergency Government	kkortenhof@co.oneida.wi.us	715-361-5191
Karl Jennrich	Planning and Zoning Director	Planning & Zoning	kjennrich@co.oneida.wi.us	715-369-6130
Michele Sadauskas	County Conservationist	Planning & Zoning	msadauskas@co.oneida.wi.us	715-369-7835
Jason Rhodes	ITS Director	Information Technology Services	jrhodes@co.oneida.wi.us	715-369-6103
Art Hilgendorf	Geospatial Admin/Asst LIO Dir	Land Information	ahilgendor@co.oneida.wi.us	715-369-6179
Andy Faust	NCWRPC	Regional Planning	afaust@ncwrpc.org	715-849-5510
Alex Hegeman	Highway Commissioner	Highway Department	ahegeman@co.oneida.wi.us	715-369-6184
Paul Fiene	Forest Director	Forestry & Outdoor Recreation	pfiene@co.oneida.wi.us	715-369-6140
Jeff DeMuth	Land Surveyor	Cardinal North Surveyors	jdemuth@cardinalnorth.com	715-482-5237

+ Land Information Council Members designated by the plus symbol

2 FOUNDATIONAL ELEMENTS

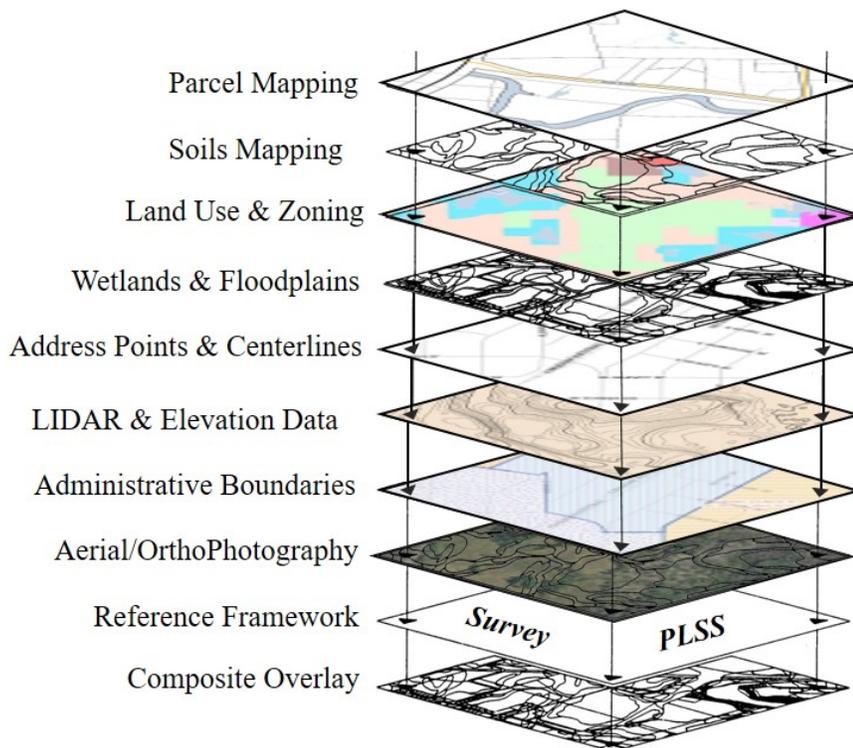
Counties must have a land information plan that addresses development of specific datasets or map layer groupings historically referred to as the WLIP Foundational Elements. Foundational Elements incorporate nationally-recognized “Framework Data” elements, the major map data themes that serve as the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

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

FOUNDATIONAL ELEMENTS

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

Oneida County has completed many of the Foundational Elements thanks to the support of the Oneida County Board and the Wisconsin Land Information Program. Maintaining the foundational elements is ongoing and contributes to the increased accuracy of our land records systems. The cost of updating the hardware-software and annual maintenance/licensing fees of land records programs is very expensive and paid from land records fees which is limiting our larger project initiatives and may need more outside funding in the future.



Public Land Survey System Monuments

Layer Status

PLSS Layer Status	Status/Comments
Number of PLSS corners (section, ¼, meander) set in original government survey that can be remonumented in your county	● 4816
Number of PLSS corners capable of being remonumented in your county that have been remonumented	● 3836
Number of remonumented PLSS corners with survey grade coordinates (see below for definition) <ul style="list-style-type: none"> ● 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 	● 3230 Survey Grade 72 Sub meter 0 Approx
Number of survey grade PLSS corners integrated into county digital parcel layer	● 3302
Number of non-survey grade PLSS corners integrated into county digital parcel layer	● Unknown
Tie sheets available online?	● Yes. http://oneida.ncwrpc.info/
Percentage of remonumented PLSS corners that have tie sheets available online (whether or not they have corresponding coordinate values)	● 100%
Percentage of remonumented PLSS corners that have tie sheets available online (whether or not they have corresponding coordinate values) and a corresponding URL path/hyperlink value in the PLSS geodatabase	● 100% <a href="http://oneida.ncwrpc.info/PLSS_Corner_Certificates/<OCID>.pdf">http://oneida.ncwrpc.info/PLSS_Corner_Certificates/<OCID>.pdf
PLSS corners believed to be remonumented based on filed tie-sheets or surveys, but do not have coordinate values	● 557
Approximate number of PLSS corners believed to be lost or obliterated	● 957
Which system(s) for corner point identification/ numbering does the county employ (e.g., the Romportl point numbering system known as Wisconsin Corner Point Identification System, the BLM Point ID Standard, or other corner point ID system)?	● Wisconsin Corner Point Identification System ● S-T-R - Alpha-numeric grid for paper copy book storage
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?	● No
Total number of PLSS corners along each bordering county	● 359
Number of PLSS corners remonumented along each county boundary	● 338
Number of remonumented PLSS corners along each county boundary with survey grade coordinates	● 334
In what ways does your county collaborate with or plan to collaborate with neighboring counties for PLSS updates on shared county borders?	● Send new or revised remonumentation records and/or coordinate values to adjoining counties as they come in.

Custodian

- Oneida County Land Information Office - Director/County Surveyor

Maintenance

- Continue maintenance on PLSS corners including USPLSS records and GPS observations. New USPLSS tie sheets are being appended to the original tie sheet to maintain a chain of record for the occupation or maintenance of the corner. Oneida County has numerous meander corners due to the many lakes & rivers. As such, original meander corners may be underwater water as a result of flowages or eroded shorelines. The numbers reported in above table have

been adjusted slightly since last plan due to the number of meander corners and other factors and is our best estimate at this time for total PLSS corners.

- Created an attribute field to track coordinate values for re-observations of PLSS corners to document repeatability and the datum adjustment used over time. Coordinates that have been reported so far have been within approximately 0.10' of the originally determined value which demonstrates reliable procedures and equipment has been used to establish the value.
- Continue to file survey maps and update index.
- Continue to file field notes and other survey source documents.

Standards

- Statutory Standards for PLSS Corner Remonumentation
 - s. 59.74, Wis. Stats. Perpetuation of section corners, landmarks.
 - s. 60.84, Wis. Stats. Monuments.
 - ch. A-E 7.08, Wis. Admin. Code, U.S. public land survey monument record.
 - ch. A-E 7.06, Wis. Admin. Code, Measurements.
 - s. 236.15, Wis. Stats. Surveying requirement.
- 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
- Oneida County will require use of the means, methods and equipment capable of meeting the 2cm precision. However, due to various factors, meeting the repeatable measurement of 2cm may not be able to be achieved in all cases. PLSS corners in wetlands, tree canopy, heavy soils, frost, monument characteristics and other natural conditions may not allow the monument to 'hold' 2cm. Reobservations are showing results of 3cm or better which is extremely good considering the conditions.
- It will be the goal of the County to have coordinate values on PLSS corners meeting one of the following 'survey grade', 'sub meter' or 'approximate' designations on all corners by 2030, subject to funding and other priorities that may emerge in the future.

Other Geodetic Control and Control Networks

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

Layer Status

- In 1994 Oneida County completed geodetic densification from stations within the Wisconsin High Accuracy Reference Network (HARN) referenced to NAD 83(1991). The network consists of 25 - 1 & 2 ppm stations which were established using the 'Guidelines to Support Densification of the Wisc High Accuracy Reference Network (HARN) using Global Positioning System (GPS) Technology' standards and specifications which were current at that time. In addition, the County established 79 - 10 ppm stations in 1994. The horizontal geodetic control is strategically placed throughout the County and has met our needs. Coordinate values are available in Oneida County, (WCCS), State Plane and Latitude and Longitude. The County assumes the custodial responsibility for the densified control stations. DOT has maintained the 1 & 2 ppm stations and has recently set one new station due to highway construction that destroyed the other station. Any new control stations set by the County would adhere to National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998. Since 1991 there have been adjustments NAD 83(1997), NAD 83(2007) and NAD 83(2011). There is very little shift between the NAD 83(1991) and NAD 83(2011). Oneida County will monitor the

effect of coordinate values generated using GPS to see if measures need to be implemented to address the issue and to seek input from professional survey organizations for guidance.

- The Wisconsin Department of Transportation (WisDOT) Geodetic Survey Unit developed a state Global Positioning System (GPS) reference station network. This network, called the Wisconsin Continuously Operating Reference Stations (WISCORS) Network, consists of permanent GPS sites, which provide real-time correctors to mobile users. These mobile users that are properly equipped to take advantage of these correctors can survey in the field to the 2 centimeter accuracy level in real-time. The program is being partnered with state and local governments, federal agencies and educational institutions. The WisDOT Geodetic Survey Unit is responsible for enhancing and maintaining the vertical and horizontal geodetic control infrastructure across the state of Wisconsin. The establishment and operation of this permanent GPS CORS network in Wisconsin will help Oneida County users in their ability to access the system in particular to develop reliable vertical data which is needed throughout the County. Currently we have 2 CORS stations in Oneida County.
- The Wisconsin Height Mod program administered by the WIDOT has completed the field observations and published the results of Phase 8 monuments.
- Oneida County supported the HARN re-observation effort led by the DOT to prepare for the new NGS reference datum described below.
- To improve the National Spatial Reference System (NSRS), NGS will replace all three North American Datum of 1983 (NAD 83) frames and all vertical datums, including the North American Vertical Datum of 1988 (NAVD 88), with four new terrestrial reference frames and a geopotential datum. The new reference frames will rely primarily on Global Navigation Satellite Systems (GNSS), such as the Global Positioning System (GPS), as well as on a gravimetric geoid model resulting from our Gravity for the Redefinition of the American Vertical Datum (GRAV-D) Project. These new reference frames will be easier to access and to maintain than the current NSRS, which relies on physical survey marks that deteriorate over time. Oneida County will monitor the development of this new reference framework and address issues as are needed or required to accommodate the transition. Oneida County expects software vendors to update software to facilitate this transition.

Custodian

- WIDOT – HARN and Height Mod network
- Oneida County Land Information Office, County Surveyor – Local Control

Maintenance

- WIDOT – HARN and Height Mod network
- Oneida County Land Information Office, County Surveyor – Local Control and will report any issue with HARN or Height Mod to WIDOT.

Standards

- HARN - National Standard for Spatial Data Accuracy, FGDC-STD-007.3-1998 and NGS Publication 58.
- Height Mod – WIDOT Specifications & NGS Publication 59
- Local Control 100 ppm

Parcel Mapping

Parcel Geometries

Layer Status

Progress toward completion/maintenance phase: In Oneida County, 100% of the county's parcels are available in a commonly-used digital GIS format, ie ArcGIS Geodatabase. Our first generation of digital index parcel maps was completed in 2009. Parcel maps are referenced to the lines of the public land survey system and are suitable for planning purposes and in many cases suitable for *assisting with* land title boundary or survey line determination. Our parcel maps are *not intended* to be a substitute for a certified land survey and are *not intended* to guarantee title to property.

- **Projection and coordinate system:** The parcel maps are published using the projection parameters for the Wisconsin Coordinate Reference System (WISCRS), Oneida County. Oneida County EPSG code is 7623 for WISCRS in Feet and 7564 for WISCRS in meters.
- **Integration of tax data with parcel polygons:** The county does have a parcel polygon model that directly integrates tax/assessment data as parcel attributes.
- **Online Parcel Viewer Software/App and Vendor name:** OneView by GISI and ArcGIS Online by ESRI
- **Unique URL path for each parcel record:** No. However parcel URL's are generated on the fly when searching on OC tax- parcel website by parcel number.

Custodian

- Oneida County Land Information Office

Maintenance

- **Update Frequency/Cycle.** Parcel polygons are updated as a parcel splits or more accurate data is received. Web mapping updates weekly.

Standards

- **Data Dictionary:** We are using FGDC standard in ESRI software, ArcCatalog. Oneida County's annual submission to DOA as part of the WLIP requirements meet their standards for acceptance. The 2020 submission was version 7 and Oneida County plans to adhere to future submission requirements. The County did a major GIS software upgrade in 2021 and the metadata will be updated in the process.

Assessment/Tax Roll Data

Layer Status

- **Progress toward completion/maintenance phase:** NA
- **Tax Roll Software/App and Vendor name:** Ascent – by Transcendent Technologies, LLC. County creates the tax roll and runs tax bills using the Ascent software.
- **Municipal Notes:** NA

Custodian

- Oneida County Land Information Office / Real Property and Treasurer

Maintenance

- **Maintenance of the Searchable Format standard:** To maintain the Searchable Format standard, the county uses the Ascent export routine and does very little modifications to be useable for the parcel submission.

- **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

- Sanitary Permits – tied to parcel number & GIS and permits scanned back to 1975
- Zoning – Land Use Permits - tied to parcel number & GIS and permits scanned back to 1985
- Non-Metallic Mining locations are captured as polygons attributed with with permit information and responsible party.
- Land use agreements or easements tied to parcels for only snowmobile trails.

Custodian

- Oneida County Planning and Zoning Department for the first three listed, Forestry for snowmobile.

Maintenance

- Ongoing. New sanitary and zoning permits numbers and images are linked to the parcel number and scanned into the system & GIS monthly. Non-Metallic yearly.

Standards

- Internal to Department

ROD Real Estate Document Indexing and Imaging

Layer Status

- **Grantor/Grantee Index:** The County Grantor/Grantee Index is in a digital database back to 1988. The paper copy books exists back to 1887 and are scanned and can be accessed online at <https://www.co.oneida.wi.us/grantorgrantee/>. All new entries are digital and can be accessed online at: <https://propertyrecords.co.oneida.wi.us/WEB/login.aspx?ReturnUrl=%2fWEB>.
- **Tract Index:** The Tract Index is PLSS, Plat and CSM based. The tract contains any recorded document number that was able to be indexed, ie deeds, mortgages, easements, restrictive covenants, Lis pendens, etc. The tract index is digital from 1997 to present and can be accessed on line at: <https://propertyrecords.co.oneida.wi.us/WEB/login.aspx?ReturnUrl=%2fWEB>.
- The paper copy tract index books have been imaged in pdf format which date back to 1887 which can be accessed on line at: <http://oneida.ncwrpc.info/ROD/> The County would like to create a digital tract back at least 30 years.
- **Imaging:** Oneida County has imaged all of the documents containing the deeds, etc back to the original patents 1887 including the Lincoln, Vilas and Forest County transcript deeds. Mortgages prior to 1975 are not imaged but it is something the county would like to do. Since 1997 all new deeds, mortgages, plats, CSM's etc are imaged and the County implemented E-Recording in March 2016.
- **ROD Software/App and Vendor Name: RecordEase** – from contractor/vendor West Central indexing (WCI).

Custodian

- County Register of Deeds

Maintenance

- New recorded images are entered into system daily and if any old images are found to be of poor quality they are re-imaged.

Standards

- s. 59.43, Wis. Stats. Register of deeds; duties, fees, deputies.
- ch. 706, Wis. Stats. Conveyances of real property; Recording; Titles.
- Ch 236, Wis Stat, Platting lands and recording and vacating plats, csm's
- Ch 703 Wis Stats Condominiums
- S 84.095(8) Wis Stats Transportation Project Plats

LiDAR and Other Elevation Data

LiDAR

Layer Status

- **Most recent acquisition year:** 2013
- **Accuracy:** The Oneida County dataset has been tested and the overall RMSE is 0.290 feet and on bare earth surfaces is 0.18 feet.
- **Post spacing:** Nominal point spacing (NPS) 1.0 meter, flown at 50% overlap
- **Contractor's standard, etc.:** See below.
- **Next planned acquisition year:** No date. Will evaluate updating if landscape changes occur or if outside funding source becomes available.
 - **QL1/QL2 acquisition plans:** If outside funding becomes available will consider. Currently considering a possible proposal from DOA partnership for a project with USGS but uncertain if County will be able to fund County's portion. If approved, flight planned for 2022 and delivered in 2023.

Custodian

- Oneida County Land Information Office

Maintenance

- The contractor has represented that errors found in the data will be reviewed and corrected.

Standards

- All deliverables were produced meeting or exceeding these guidelines or specifications:
 1. USGS LiDAR Guidelines and Base Specifications v. 1.
 2. The Guidelines and Specifications for Flood Hazard Mapping Partners Appendix A: Guidance for Aerial Mapping and Surveying; Federal Emergency Management Agency. April 2003 (including the Procedure Memorandum No. 61-Standards for LiDAR and Other High Quality Digital Topography, September 2010.
 3. The USGS LBS v1 was followed as a guideline for how the LiDAR was acquired.
 4. In addition, the Contractor flew the entire area at 50% overlap to ensure coverage in the forested areas.

LiDAR Derivatives

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

Layer Status

The following layers are complete.

- 1) countywide 2-foot contour surface;
- 2) bare earth DTM;
- 3) first return digital surface model (DSM);
- 4) digital elevation model (DEM);
- 5) intensity images;
- 6) hydro enforced break lines which are hydro-flattened;

- 7) low confidence area polygons;
- 8) additional classifications for low, medium and high vegetation, buildings, bridges, and dams

Custodian

- Oneida County Land Information

Maintenance

- See above

Standards

- See above

Other Types of Elevation Data

Layer Status

- Hillshade

Custodian

- Oneida County Land Information

Maintenance

- As needed

Standards

- ESRI Arc 3d Analyst

Orthoimagery

Orthoimagery

Layer Status

- **Most recent acquisition year:** 2019
- **Resolution:** 6" resolution 4 band digital
- **Contractor's standard:** Vexcel UltraCam Eagle Mark 3 system at 30% sidelap.
- Meets ASPRS Class II standards for horizontal accuracy, +/- 2.4 feet at 95% confidence level
- **Next planned acquisition year:** 2024-2025
- **WROC participation in 2025:** Planning to participate but subject to funding.

Custodian

- Oneida County Land Information

Maintenance

- Typically 5 years to coincide with WROC

Standards

- The 6-inch orthoimagery conforms to ASPRS Class II standards for 1" = 100' scale mapping with an ortho image ground sample distance (GSD) of <6 inches. The horizontal accuracy will be measured by root mean statistical error (RMSE), which will be 2.0-feet or less

Historic Orthoimagery

Layer Status

- **1938**, resolution & scale unknown; B&W; paper (Acquired from Robinson Library)
- **1989**, film based and mylar to meet 1"=400' scale mapping standards
- **1998**, 18" resolution, scale unknown; B&W; mylar & digital
- **2005**, 12" resolution, scale 1:200; Color; paper & digital
- **2010**, 12" resolution, scale 1:100; Color; digital
- **2015**, 6" resolution, scale 1:100; Color and Infrared; digital
- **2019**, 6" resolution, scale 1:100; Color and Infrared; digital

Custodian

- Oneida County Land Information

Maintenance

- Archive only.

Standards

- Various, contact county for specifics if needed

Other Types of Imagery

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

Layer Status

- 2019, Infra-red

Custodian

- Oneida County Land Information

Maintenance

- Plan for in 2024 or 2025

Standards

- Vexcel UltraCam Eagle Mark 3 system at 30% sidelap.
- 6-inch pixel resolution
- 4-band (RGB-NIR)
- Meets ASPRS Class II standards for horizontal accuracy, +/- 2.4 feet at 95% confidence level

Address Points and Street Centerlines

Address Point Data

Layer Status

- Oneida County Land Information
- All known parcels with a building for human habitation have an address assigned. The County administers the countywide addressing and road naming ordinance. Address points are assigned to all buildings used for human occupation. Other buildings are addressed as needed, ie separate utilities, garage only on a parcel, camping pads, etc. Address points are tied to the parcel number and are generated from Orthoimagery or other means. NextGEN 9-1-1 is in the process of being built for Wisconsin. The network it will run on has been contracted and a key component of the system is accurate local GIS data. Oneida County participated in the NextGEN taskforce for establishing GIS data standards that will be used by the system to ensure timely and accurate location services for 911 calls, text messaging and video. Oneida County's address and street centerline data has been updated to meet these requirements but still needs work like all counties in the state.

Custodian

- Oneida County Land Information

Maintenance

- Weekly

Standards

- Chapter 16 of Oneida County Code for addressing and follow the US Postal Standard as near as practical.
- NENA NG911 Data Standards
- Wisconsin GIS NG9-1-1 Data Standard

Building Footprints

Layer Status

- Building footprints were last updated in 2019. A 'point' has been added to new building locations based on address application, LiDAR, Google Maps and with newer Orthoimagery.

Custodian

- Oneida County Land Information

Maintenance

- Points are added as new addresses are assigned to buildings; however accessory structures are not located.

Standards

- Internal to office

Other Types of Address Information

e.g., Address Ranges

Layer Status

- Address ranges maintained in Street Centerlines

Custodian

- Oneida County Land Information

Maintenance

- Weekly

Standards

- See Street centerlines

Street Centerlines

Layer Status

- The County has a complete centerline layer and address range of all named public and private roads and active railroads in the County. The class of the road is added as an attribute, ie town, county, state, federal forest, county forest, public private. The Land Information Office maintains the Master Street Address Guide in cooperation with the Sheriff's Office. The County also maintains a point for the driveway location of the address.

Custodian

- Oneida County Land Information

Maintenance

- Weekly

Standards

- Complies with the County GIS geodatabase design.
- The County adheres to the PO Addressing Standard and/or NENA standard for road naming conventions as much as practical and does not allow new roads to duplicate another road name in the County. The County is also working to meet the NewWorld system requirements.
- Sheriff department records management system

Rights of Way

Layer Status

- The right-of-way of public roads was developed as part of the parcel mapping process and assigned a PIN when a recorded document is found to support the road description. However, many of our roads lack written descriptions or surveys so the positional accuracy needs improvement and will be updated as new information is obtained from various sources. Public

right-of-ways have a ROW polygon associated with the road and when known are tied to the document to support the right-of-way.

- **How maintained:** The Right-of-way layer is revised – maintained as part of the parcel maintenance based on new survey or supporting documents.

Custodian

- Oneida County Land Information

Maintenance

- Daily

Standards

- Complies with the County GIS geodatabase design

Trails

e.g., Recreational Trails, Snowmobile Trails

Layer Status

- County funded Snowmobile trails are mapped along with intersection identification points for emergency location purposes. Trail heads or parking areas are assigned an address for emergency location purposes. ATV/UTV Trails on County owned lands are mapped.
- Parks and recreational trails on county owned lands are maintained by the Forestry Department. Maps for County Parks, X-Country ski trails/ hiking, biking and other miscellaneous trails in the county forest can be accessed on our static mapping site with maps in pdf format.
- Boat Landings are separate layer, however some may be part of the road right-of-way. We have boat launches as part of our dataset but updates and further attribution is needed indicating the status of the landing, improved, walk in etc. and is planned as time permits. Public access to waterbodies are mapped as part of the parcel layer.

Custodian

- Oneida County Forestry Department and Land Information Office

Maintenance

- As trails are changed, the snowmobile clubs provide the information to the County for updates Oneida County Forestry Department and Land Information Office. Forestry Department provides updates to ATV/UTV trails.

Standards

- Complies with the County GIS geodatabase design

Land Use

Current Land Use

Layer Status

- The County's Comprehensive Plan includes a 'generalized' land use 2010 map that is not included in the geodatabase at this time but accessible in the plan document (http://www.co.oneida.wi.us/wp-content/uploads/2018/08/OC_Plan_Maps2.pdf). The County's tax database contains the DOR classification code that can be linked to the parcel dataset in the GIS database, which if needed, could be used to create a generalized map.

Custodian

- Planning and Zoning Department, NCWRPC

Maintenance

- Last updated 2010

Standards

- NCWRPC

Future Land Use

Layer Status

- 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.

Custodian

- Planning and Zoning Department, NCWRPC

Maintenance

- As municipalities update their plans.

Standards

- s. 66.1001, Wis. Stats. Comprehensive planning.
 - If a future land use map is created as part of an adopted comprehensive plan(s), then it can be assumed to meet the standards in s. 66.1001
 - According to s. 66.1001, beginning on January 1, 2010, if a town, village, city, or county enacts or amends an official mapping, subdivision, or zoning ordinance, the enactment or amendment ordinance must be consistent with that community's comprehensive plan.
 - 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.

Custodian

- Planning and Zoning Department

Maintenance

- District boundaries are changed any time an ordinance change is enacted.

Standards

- Zoning districts are mapped in accordance with the Oneida County Planning and Zoning Ordinances
- s. 59.69, Wis. Stats.

Shoreland Zoning

Layer Status

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

Custodian

- Planning and Zoning Department

Maintenance

- District boundaries are changed any time an ordinance change is enacted.

Standards

- Zoning districts are mapped in accordance with the Oneida County Planning and Zoning Ordinances

Farmland Preservation Zoning

Layer Status

- Administered by county but not in GIS format.
- **Year- of certification:** 2002. We only have one farm in the County currently registered.

Custodian

- Planning and Zoning Department
- Land Conservation Department

Maintenance

- As needed

Standards

- s. 59.69, Wis. Stats.
- Oneida County Zoning and Shoreland Protections Ordinance.

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 FIRM map.
- Letter of Map Amendments are shown as a point with a link to the letter.

Custodian

- Planning and Zoning Department

Maintenance

- Updated as LOMA or other official documentation is received.
- The positional location of the flood boundaries of the FIRM maps provided by FEMA are poor. The County highly desires updated FIRM maps from FEMA or DNR.

Standards

- FEMA and Oneida County Floodplain Ordinance

Airport Protection

Layer Status

- The County does maintain a GIS representation of airport protection zoning boundaries.
- Airport protection zoning map depicts:
 - Height limitations

Custodian

- Rhinelander- Oneida County Airport Commission, FAA, Planning and Zoning Department

Maintenance

- As changes are made, which are very rare.

Standards

- Unknown

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

- The City of Rhinelander Zoning layer is included with the County GIS geodatabase.

Custodian

- City of Rhinelander Inspection department

Maintenance

- Last updated July 2021 and maintains as zoning changes are made and submitted to the County

Standards

- unknown

Administrative Boundaries

Civil Division Boundaries

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

Layer Status

Complete, 20 Towns, 1 City

Custodian

- Oneida County Land Information
- City of Rhineland, Annexations

Maintenance

- All annexations are filed with the office and updated as they occur. Positional accuracy of the boundaries is updated as more accurate control is obtained

Standards

- Spatially aligned to parcels. Complies with the County GIS geodatabase design and the Consolidated Boundary Annexation Survey (CBAS) standards

School Districts

Layer Status

- Progress toward completion/maintenance phase: Complete
- Relation to parcels: Spatially aligned to parcels in GIS.
 - Attributes linked to parcels: Oneida County Assessment Tax codes

Custodian

- Oneida County Land Information
- Assessor – Real Property Lister

Maintenance

- Daily as splits of parcels occur, Real Property assigns codes. Validity checks are run yearly.

Standards

- Spatially aligned to parcels. Complies with the County GIS geodatabase design. Assessment classification codes by DOR.

Election Boundaries

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

Layer Status

- The County has current voting ward, aldermanic, county board supervisory districts and polling places as part of the jurisdictional boundaries or points in the GIS. The location of the voting places is not shown but addresses are published by the County Clerk.

Custodian

- County Clerk
- NCWRPC submits County GIS dataset Legislative Technology Services Bureau yearly
- Oneida County Land Information

Maintenance

- As annexations occur boundaries are updated and also when required by redistricting. Currently working on the 2021 redistricting plan.

- Oneida County will comply with the Wisconsin statute that requires submission of ward level Geographic Information System (GIS) data to the Legislative Technology Services Bureau (LTSB) twice a year, by January 15th and July 15th.

Standards

- Spatially aligned to parcels. Complies with the County GIS geodatabase design.

Utility Districts

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

Layer Status

- Sanitary: The County's tax data base includes a code designating which parcels are within a sanitary district which can be linked to the parcel dataset and a map created as needed. There are 4 districts and the city of the Rhinelander in the county.
- Tax incremental financing districts (TIF): The County's tax database includes a code designating which parcels are within a TIF and there is a layer in our GIS which shows the boundaries.

Custodian

- Sanitary District Boards, Towns, City and Land Information Office.

Maintenance

- The County runs a validity test of the assessment code against the GIS dataset to determine if the parcels and boundary districts are consistent. Corrections were made and updated as needed.

Standards

- Spatially aligned to parcels. Complies with the County GIS geodatabase design.

Emergency Service Boundary – Law/Fire/EMS

Layer Status

These layers are included in the Sheriff Department Dispatch System 'NewWorld'. Data preparations are being made for Next-Gen 911.

- Law Enforcement: Completed
- Fire: Completed
- EMS: Completed

Custodian

- Land Information/Emergency Government/Sheriff/Towns

Maintenance

Maintenance: As service area or location of facilities change the data is updated.

Standards

- Wisconsin GIS NG9-1-1 Data Standard (Emergency Service Boundary)
- Complies with the County GIS geodatabase design.

Public Safety Answering Points (PSAP) Boundary

Layer Status

- **PSAP Boundary:** Completed – PSAP boundary coincident with the County Boundary.

Custodian

- Emergency Government/Land Information

Maintenance

- As service area or location of facilities change the data is updated.

Standards

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

Provisioning Boundary

Layer Status

- Currently the provisioning boundary is the County boundary. This could change a little as we work with adjacent counties to determine how to handle things on our borders. This layer represents the coverage area for which GIS data providers are responsible for submitting GIS data for NG9-1-1. The data provided must cover the entire extent of the coverage area that defines their geographic area of responsibility but data must not extend beyond the identified coverage area.

Custodian

- Emergency Government/Land Information

Maintenance

- As service area or location of facilities change the data is updated.

Standards

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

Other Public Safety

e.g., Healthcare Facilities

Layer Status

- Hospitals, and Government Facilities are currently identified in the County All Hazards Mitigation Plan and future plans are to include point data in the Sheriff Department NewWorld system and/or County GIS.

Custodian

- Emergency Government/Land Information

Maintenance

- Currently revised in All Hazards Mitigation Plan

Standards

- NewWorld or County GIS standards

Lake Districts

Layer Status

- Lake Districts: The County's tax data base includes a code designating which parcels are within a lake district which can be linked to the parcel dataset and a layer with the boundaries are shown in our GIS. There are 9 Lake Districts in the County.

Custodian

- Lake District Boards, Towns and Oneida County Land Information Office.

Maintenance

- The County runs a validity test of the assessment code against the GIS dataset to determine if the parcels and boundary districts are consistent. Corrections were made and updated as needed.

Standards

- Spatially aligned to parcels. Complies with the County GIS geodatabase design.

Native American Lands

Layer Status

- There are two sections of land in the county that have Native American parcels and the parcel mapping carries an attribute to identify the tribal lands

Custodian

- Oneida County Land Information

Maintenance

- As needed

Standards

- County Parcels mapping

Other Administrative Districts

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

Layer Status

- The County has created a large tracts ownership dataset that includes state, federal, county and industrial forest lands. In addition the County's tax database contains the DOR classification code that is accessible in the tax database and can be linked to the geodatabase, which if needed, could be used to create a generalized map. The County also maintains County owned 'forest stands' used in the Forestry Department for management purposes.

Custodian

- Oneida County Land Information

Maintenance

- Updated as ownership changes.

Standards

- Spatially aligned to parcels. Complies with the County GIS geodatabase design.

Other Layers

Hydrography Maintained by County or Value-Added

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

Layer Status

- The county waterbody layer was created by stereo digitizing the 1989 film based aerial photography and tied to the DNR master water body inventory for attribute information. The County would like to revise the geometry of the waterbodies based on the 4 band photography and the LiDAR data if funding and time allows in the future.
- The 2013 LiDAR data set has hydro enforced elevation derived break lines, however it was based on water levels that were low in 2013.
- AIS: Aquatic invasive species areas are mapped in project areas.

Custodian

- Oneida County Land Information Office and Land Conservation department.

Maintenance

- Waterbody boundaries are updated occasionally when parcel mapping in an area shows a significant difference.
- AIS as project determines.

Standards

- Complies with the County GIS geodatabase design.

Cell Phone Towers

Layer Status

- Cell towers and other communication towers that are registered with FCC or permitted by Oneida County are mapped and have been used for broadband analysis.

Custodian

- Sheriff Department, Planning & Zoning and Oneida County Land Information

Maintenance

- As new towers are added, moved or removed.

Standards

- Complies with the County GIS geodatabase design.

Bridges and Culverts

Layer Status

- The County desires to inventory bridges and culverts for County Highways. The county developed an app but have not been able to assign personnel to do the collection yet.

Custodian

- County Highway Department and Oneida County Land Information Office.

Maintenance

- Will develop procedures for maintenance once implemented.

Standards

- Initial database design per DOT

Other/Miscellaneous

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

Layer Status

- Wetlands: DNR determined wetlands are included with the county GIS but are not re-distributed per DNR policy.
- Non-metallic permitted sites are mapped yearly and maintained in the GIS.
- Soils: Joint project with NRCS and County completed the soils maps and are included in the county GIS.
- Airports incomplete.
- Active railroads
- AIS Aquatic and Invasive species inventories
- TIS: Terrestrial invasive species areas are mapped in project areas.

Custodian

- Oneida County Land Information Office

Maintenance

- If new data is created in the future, the County will evaluate it and incorporate it in the County GIS
- The County desires new wetland map data from the DNR.

Standards

- Complies with the County GIS geodatabase design.

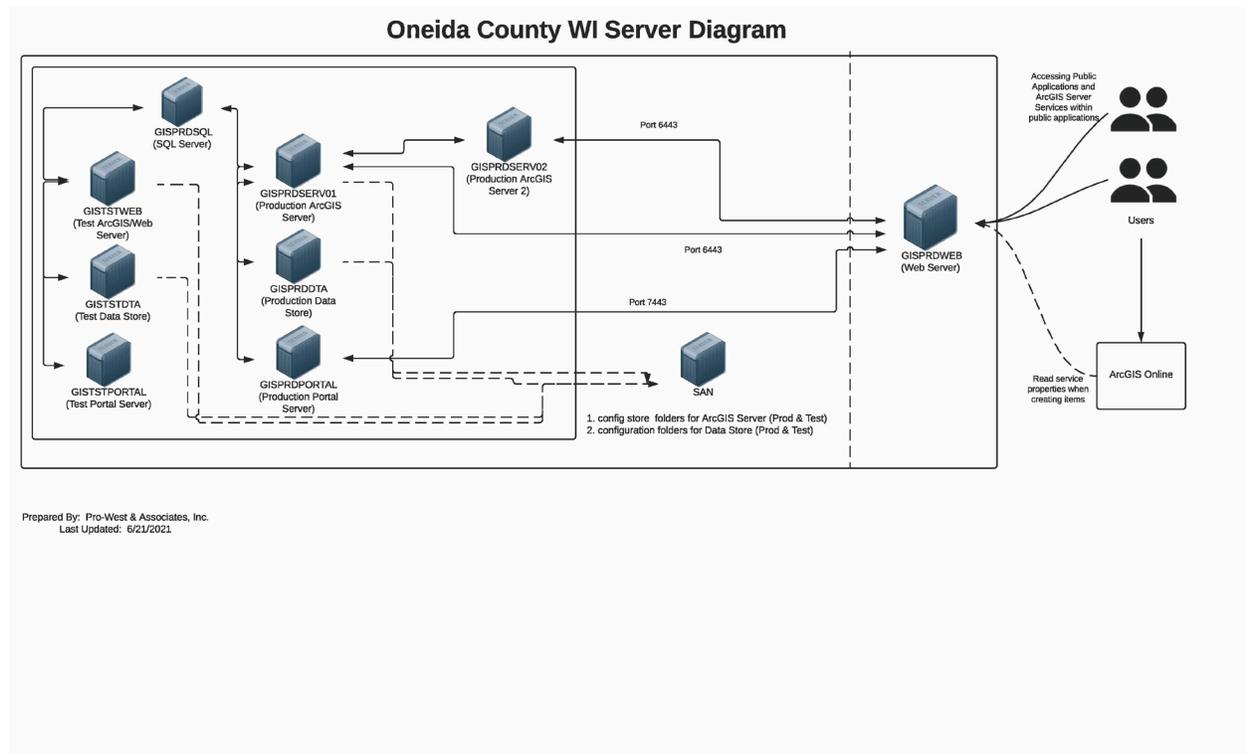
3 LAND INFORMATION SYSTEM

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

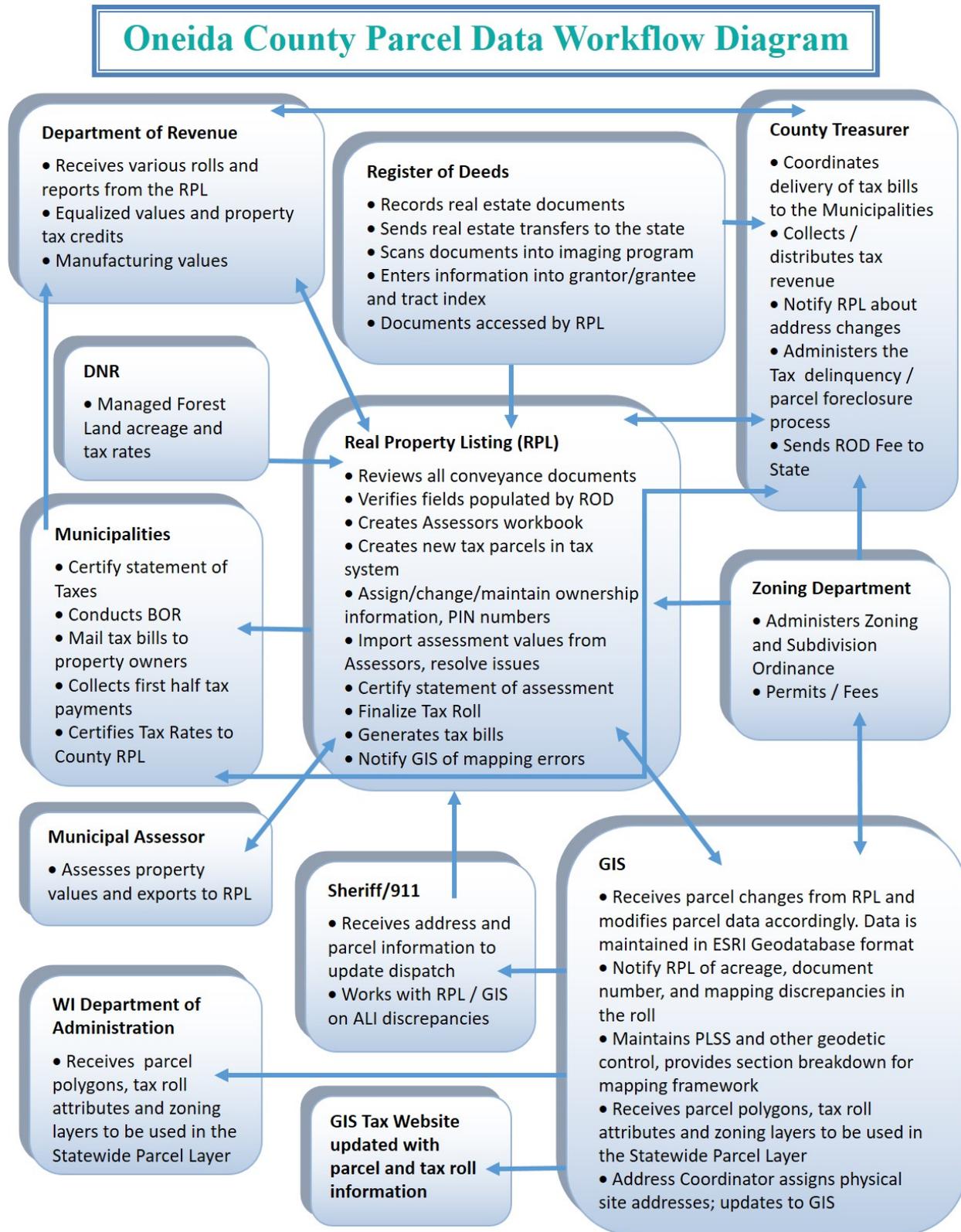
One integration requirement is listed under s. 16.967(7)(a)(1), Wis. Stats., which states that counties may apply for grants for:

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

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



County Parcel Data Workflow Diagram



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

- GIS system contains IBM Servers with fail over, each having 8 virtual machines, plus a virtual machine in the DMZ hosting web applications. Land Records tax assessment application (Ascent) has been installed on an IBM Server.

Software

- Microsoft Windows Server 2019 Datacenter, Microsoft SQL Server 2019, ESRI Software Suite, Ascent Real Property System.
- **County currently uses ArcGIS Pro:** Yes – limited. Since PRO has severe limitation, its full implementation and use may be in question. ESRI need to make it easier to use.
- **County plans to upgrade to ArcGIS Pro:** N/A

Website Development/Hosting

- Oneida County hosts all land records data on Oneida systems. Land records data can be accessed using one of several applications. The GIS Mapping website was provided by GISi Inc. and maintained by Oneida County. Oneida County also has other website applications it developed using ArcGIS Online. Land records tax data can be accessed using Ascent Land Records Suite by Ttech or the OCTAX site created by Oneida County. The Register of Deeds and Planning and Zoning also have their data available through the county website.

Metadata and Data Dictionary Practices

Metadata Creation

- **Metadata creation and maintenance process:** Basic metadata exists for 60% of our GIS layers including parcels, zoning and addresses and is ongoing as resources allow.

Metadata Software

- **Metadata software:** ArcCatalog
 - 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:** Typical required fields such as description, summary, resource citation, contacts, etc.

Metadata Policy

- **Metadata Policy:** Driven by ArcCatalog. Oneida County does not have a formal metadata policy.

Municipal Data Integration Process

- Oneida County is the custodian for the countywide real property system and tax bill creation. The County works with the municipalities Assessor, Clerk and Treasurers in obtaining the assessment data from the Assessor needed to create the assessment roll, and the clerks and treasurers to produce the tax bills and tax rolls. The County is responsible for reviewing the deeds and updating the ownership data, ie owners name, mailing address, document, etc.
- The County also maintains the county wide address and master street guide for the 911 system. The County works with the municipalities addressing coordinator for placements of the address and road name signs.
- The County has Comprehensive Shoreline Zoning and all municipalities come under County zoning jurisdiction except the City of Rhinelander. The City provides City's zoning, annexations, TIF districts and other boundary information to the County which is housed on the County's GIS system.

- Oneida County has a strong cooperative working relationship with the municipalities where the County regularly provides data to municipalities for land related projects, planning purposes, land use and other issues. Many of the municipalities have a link on their web pages to our land records systems and they regularly use the mapping site.

Public Access and Website Information

Public Access and Website Information (URLs)

Public Access and Website Information

GIS Webmapping Application(s)

Link - URL	GIS Download Link - URL	Real Property Lister Link - URL	Register of Deeds Link - URL
https://gis.co.oneida.wi.us/oneview/	https://docs.google.com/forms/d/e/1FAIpQLScDxdl8djcNkpJ8hadRThB06W3O45NPBFJmiXSPZ0vml181yw/vie wform?c=0&w=1	http://octax.co.oneida.wi.us/	https://propertyrecords.co.oneida.wi.us/WEB/login.aspx?ReturnUrl=%2fWEB

Single Landing Page/Portal for All Land Records Data

URL

<http://octax.co.oneida.wi.us/>

Web Services/REST End Points

URL

<https://gis.co.oneida.wi.us/arcgis/services>

Municipal Website Information

Municipal Website Municipal Website URL

N/A N/A

Data Sharing

Data Availability to Public

Data Sharing Policy

- Most of Oneida County GIS data is available for FREE download at <http://oneida.ncwrpc.info/>.
- LiDAR and derived datasets are available for purchase, \$50 per request plus \$5 per 5000'x5000' tile.
- Oneida County and other Counties full LiDAR data sets are available for free from a State site at: <https://www.sco.wisc.edu/data/elevationlidar/>
- The Oneida County countywide 2' topographic contour dataset and be downloaded for free from the Oneida County FTP site. Please email your request to lio@co.oneida.wi.us and we will send you a temporary log in to download the data.
- Current Tax records data available county wide for \$50.
- Customized digital data requests are handled through our ITS and Land Information Offices in cooperation with the custodian of the data.
- Digital orthophotography \$500 countywide.

Open Records Compliance

- Oneida County adheres to the Wisconsin Open Records Law for access to land records.

Data Sharing Restrictions and Government-to-Government Data Sharing

Data Sharing Restrictions

- Oneida County has a data disclaimer and a data use policy that must be signed prior to delivery of data. Email lio@co.oneida.wi.us for request form.

Government-to-Government Data Sharing

- Oneida County regularly engages with other governmental agencies in sharing of GIS data. Since the County GIS is online for free download, the direct requests by agencies have

declined. Typically the County will request an exchange of data. The County would like to have DOT make their historic 'gas tax maps' available to a public download site.

Training and Education

- County staff regularly attends online or in-person conferences, workshops and/or training sessions sponsored by the following: Wisconsin Land Information Association; Wisconsin Society of Land Surveyors; Wisconsin GIS Users Group; Real Property Lister Association; Register of Deeds Association, Treasurers Association; ESRI Vendor; Trimble Vendor; County Code Administrators. The ESRI SGELA has allowed for a very attractive webinar or online training opportunities.
- **The county will continue to use the WLIP training and education grant for land records staff development.**

4 CURRENT & FUTURE PROJECTS

This chapter lists the current and future land information projects the county is currently undertaking or intends to pursue over its planning horizon. A project is defined as a temporary effort that is carefully planned to achieve a particular aim. Projects can be thought of as the *means* to achieving the county's mission for its land information system. **While there are several projects listed in this section, they are not listed in the order that they may be implemented, and not all are expected to be started or completed within this planning cycle. A few projects do not have estimated costs at this time. However, these projects are listed within this planning cycle so that the County may spend WLIP funds if an opportunity arises to implement them, or if insufficient levy funding is available.**

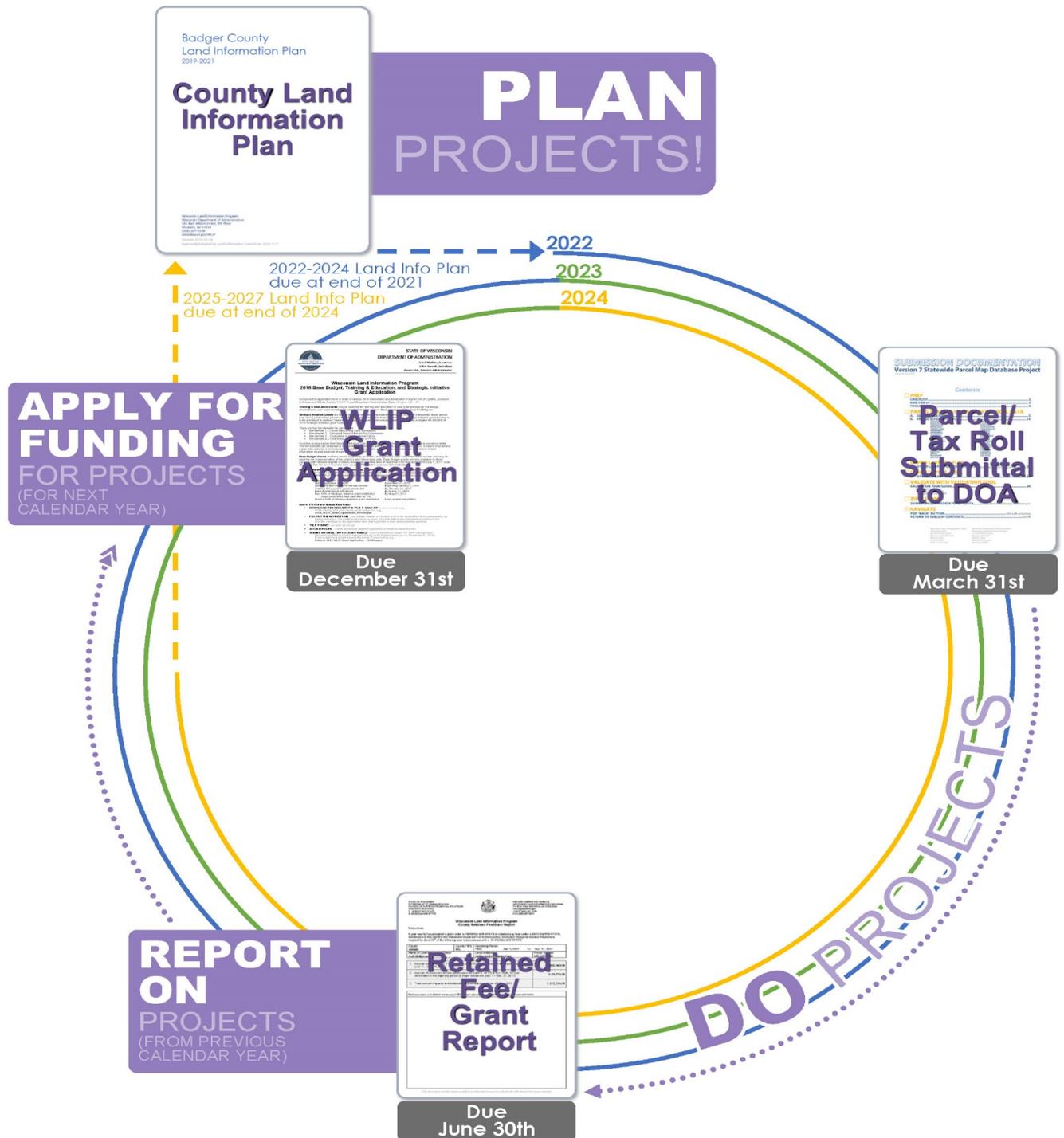


Figure 1. The WLIP Land Information Plan/Grant Project Cycle

Project Plan for PLSS (Benchmark 4)

Project Title: Project Plan for PLSS (Benchmark 4)

Project Description/Goal

Planned Approach

- Use most of the Strategic Initiative monies each year to continue to remonument and/or establish control on PLSS corners to Survey Grade accuracy concentrating on township boundaries then interior section.
 - **Land Info Spending Categories:** PLSS

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:** ± 957
- **Number to have new coordinates established:** ± 1514
- **Accuracy class for these new coordinates:** Survey Grade is goal but may have to settle for Sub-meter or Approximate depending on funding and accessibility of corner location. Some locations are under water.
- **Way in which these points will be integrated into the parcel fabric:** All coordinates are integrated into the Parcel layer upon collection, regardless of accuracy level, i.e., survey grade, sub meter or approximate. Any new survey grade coordinates or upgraded coordinates will be added and the Parcel layer will be adjusted.

Missing Corner Notes

- **Documentation for any missing corner data:** Many of the lost or obliterated corners are meander corners. Each corner is situation dependent and various methods will be used to document the status of the corner as time permits.

County Boundary Collaboration

- Oneida County has provided any new monumentation records and/or coordinates to the adjoining counties and will continue to do so if new forms or coordinates are obtained. 95% of corners on the County boundaries are completed and the last 5% may be the lost, obliterated.

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.
- All PLSS survey information, which is integrated into the parcel boundary layer, is utilized by the Real Estate community (surveyors, title companies, attorneys, realtors, etc.), construction industry (i.e., architects, engineers, general contractors, plumbers, etc.), and the general public will access accurate property boundary information in searchable, digital format available on the internet and hardcopy documents from the appropriate County Office.

Objectives/Measure of Success

- The objective is to meet Benchmark 4 (Completion and Integration of PLSS) by 2030 if funding is available. Completion date revised based on experience now with the actual cost to remonument a corner and the more difficult ones lie ahead.
- As GPS data is collected and processed, it is integrated into the parcel layer as well as all layers dependent upon the accuracy of the parcel boundaries.
- The overall goal of the benchmark is to capture all the PLSS corners in the County. However, due to the number of inaccessible corners located in waterbodies or flowages it may not be possible to locate those corners. In addition the 'lost' corners in large blocks of public lands are of low priority.

- A realistic measurement of success would be to capture all the accessible PLSS corners at survey grade or sub meter level for the 557 PLSS corners that exist but may not have coordinates or a tie sheet and to work the County Forest Lands and other areas where corners are lost/obliterated.

Project Timeframes

Timeline – Project Plan for PLSS **Example**		
Milestone	Duration	Date
Project start	Projected over next 3 years	February 1, 2022 February 1, 2023 February 1, 2024
Contract and or in-house	30 days	
Remonumentation	16 months each	Feb1, 2022-June 1, 2023
Project complete	June 1 st of each succeeding year.	2030?

Responsible Parties

- Land Information, County Surveyor

Estimated Budget Information

- See table at the end of this chapter.

Project #1: Register of Deeds Land Records Management System

Project Description/Goal

- The County will be moving all systems off the AS 400 and the Reg of Deeds systems for electronic tract index and images of deeds was one of the first to be updated or replaced. The IMS imaging system is planned to be moved to a server based system next.
- **Land Info Spending Category:** Software

Business Drivers

- All land records users to have access to recorded documents.
- Moving IMS off the AS 400.

Objectives/Measure of Success

- All images and indexes are accurately converted to new system
- System up and running daily

Project Timeframes

Timeline – Project #1 Title		
Milestone	Duration	Date
Project #1 start	2 years	In progress
Project complete		2024

Responsible Parties

- IT Department, Register of Deeds, Land Information

Estimated Budget Information

- See table at the end of this chapter.

Project #2: Orthoimagery 2025 (WROC Program)

Project Description/Goal

- The Wisconsin Regional Orthoimagery Consortium (WROC) is a multi-entity group. The goal of the consortium is to build and sustain a multi-participant program to acquire digital orthoimagery and

elevation data throughout Wisconsin. The WROC approach brings a number of potential benefits to participants including cost savings, specifications and standards support, customized datasets, data sharing between members and partners, and procurement support. The aerial mapping services provided under WROC will continue to evolve to meet the needs of local government members and partner organizations.

- Oneida County plans to participate in the WROC 2025 to capture countywide 6" or 3" color/IR ortho rectified imagery.
- **Land Info Spending Category:** Orthoimagery

Business Drivers

- Parcel mapping – universally used by government agencies, private businesses, and the general public.
- Asset management – aids in locating assets for preliminary planning and reduces field verification expenses.
- Property assessment – aids assessors in property valuation for equitable taxation.
- Utility facility mapping – accurate mapping is necessary for planning and maintenance of utilities.
- Environmental monitoring and management
- Impervious surface mapping – calculated using imagery
- Building permit tracking
- Zoning enforcement – change detection; zoning violations, planning
- Emergency response
- Municipal growth planning - annexation
- Forest management
- Floodplain mapping
- Preliminary engineering design
- Public meeting displays – visual aids are important to communicate information concerning property changes, assessment values, etc.

Objectives/Measure of Success

- Acceptance of countywide 6 or 3" inch resolution, 4-band imagery as the standard base product.

Project Timeframes

- Project timeline dependent upon the order in which the executed contract is received and when flight specifications, ie snow cover duration, sun angle, etc are optimal

Timeline – Orthoimagery		
Milestone	Duration	Date
Project start		June 1 2024
Contracting	90 days	June – August 2024
Capture imagery	30 days	April – May 2025
Delivery and review	4 months	Sept – Dec 2025

Responsible Parties

- Wisconsin Regional Orthophoto Consortium – vetting contracted services; negotiating contributions from partnership funding sources
- NCWRPC assist with review
- Oneida County Land Information

Estimated Budget Information

- See table at the end of this chapter.

Project #3: Replacement of Real Property & Tax System

Project Description/Goal

- Complete real property, tax listing, taxation processing, permitting, sanitary and related land records software to replace the existing AS 400 applications in coordination with IT, Land Info, Planning & Zoning, Treasurer and Register of Deeds
- **Land Info Spending Category:** Software

Business Drivers

- Current in-house system will be phased out in 5 years

Objectives/Measure of Success

- System replaced and working error free

Project Timeframes

Timeline – Orthoimagery		
Milestone	Duration	Date
Project start		Jan 1 2020
Real Property -Tax	completed	completed
Permits software	4 months	Sept 2021 – April 2022

Responsible Parties

- ITS, Land Information, Zoning, Treasurer, Register of Deeds

Estimated Budget Information

- \$60,000 to complete.

Project #4: Maintain GIS Datasets

Project Description/Goal

- Keep GIS data current. As more accurate information is obtained datasets need to be updated to maintain the integrity of the system.
- **Land Info Spending Category:** Parcel mapping

Business Drivers

- All land records users. Outdated information diminishes the credibility of the data.

Objectives/Measure of Success

- Updated parcel maps by March of each year, add new road, address, zoning and boundaries as they occur.

Project Timeframes

- Yearly

Responsible Parties

- Oneida County Land Information

Estimated Budget Information

- TBD – Staff time

Project #5: Register of Deeds Electronic Tract Index Pre 1997

Project Description/Goal

- Create electronic tract index back at least 30 years

- **Land Info Spending Category:** Other. Register of Deeds documents.

Business Drivers

- Register of Deeds, Title companies, County land records departments

Objectives/Measure of Success

- Enter from manual tract index books or directly from documents so a tract search can be performed electronically back at least 30 years

Project Timeframes

- Depends on available time and budget, 2022 – 2030.

Responsible Parties

- Register of Deeds

Estimated Budget Information

- TBD - Staff time, possible consultant.

Project #6: Local Mapping Control

Project Description/Goal

- Obtain control in areas where parcel mapping needs more accuracy by using GPS or information obtained from area surveyors and remap the areas.
- **Land Info Spending Category:** Parcel Mapping

Business Drivers

- Land Information and all records users.

Objectives/Measure of Success

- Use GPS to determine coordinates on lot corners. The areas where we need more control are usually associated with old plat or poor metes and bounds descriptions.

Project Timeframes

- Ongoing

Responsible Parties

- Land Information Office

Estimated Budget Information

- \$5,000 contracting or purchasing of data and possible Staff time.

Project #7: Mobile mapping Apps

Project Description/Goal

- Add more individual mapping applications for mobile devices.
- **Land Info Spending Category:** Website Development

Business Drivers

- All land related departments, public.

Objectives/Measure of Success

- Simple mapping apps are becoming more common for specific purposes and as requests from the various departments come in they will be evaluated for implementation.

Project Timeframes

- Depends on available time 2022 - 2025

Responsible Parties

- Land Information, ITS, Consultants

Estimated Budget Information

- TBD - Staff time and Consultants depends on type and complexity of request.

Project #8: NewWorld GIS Integration & NG911

Project Description/Goal

- Ensure that the County GIS data integrates with the new 911 NewWorld upgrade and GIS data is prepared for Next Gen 911.
- **Land Info Spending Category:** Address points

Business Drivers

- State initiative urging counties to prepare for Next Gen 911 requirements
- Need to maintain current 911 system

Objectives/Measure of Success

- Compliance with data standards set forth and guided by statewide NG911 Plan
- To provide for a seamless update of GIS dataset so there is no duplication of effort and one map is used for 911 system.

Project Timeframes

- 2022 - 2025

Responsible Parties

- Sheriff, Emergency Government, Land Information, ITS

Estimated Budget Information

- TBD - Staff time and consultant.

Project #9: Permit Imaging – Online Applications

Project Description/Goal

- To maintain the use of document imaging and GIS to “geocode” documents to geography such as permits and make them available to the public via the Internet.
- Work toward Online permit application and submittal.
- **Land Info Spending Category:** Other Parcel Work

Business Drivers

- Contractors being able to retrieve data 24/7
- Increase efficiency of Zoning Department with geocoded permits

Objectives/Measure of Success

- Online application system functioning.
- Permits geocoded back 30 years

Project Timeframes

- Online applications, unknown, depends on the permit module being completed.
- Add new permits within 3 months of issuing permit

Responsible Parties

- Planning & Zoning, ITS, Land Information

Estimated Budget Information

- TBD – Staff time.

Project #10: UAV Technology

Project Description/Goal

- Follow FCC and Legislative rules and regulations for possible implementation of UAV technology to aid in land records management. Currently Sheriff Dept has a unit for search and rescue and disaster recon.
- **Land Info Spending Category:** Hardware - Software

Business Drivers

- Search and rescue, non-metallic mine checks, bridge checks, flooding documentation, 3D model, change detection, algae bloom mapping, oak wilt or other tree disease detection,

Objectives/Measure of Success

- Research possibilities and technology to see if Sheriff Dept unit use could be expanded on if independent unit should be obtained.
- If a decision is made to pursue, obtain appropriate certifications and training.

Project Timeframes

- 2020 - 2025

Responsible Parties

- Land Information, Sheriff, Forestry, Zoning, ITS

Estimated Budget Information

- TBD

Project #11: GPS Equipment, Scanners, Large format printers, etc

Project Description/Goal

- Keep equipment current and functional.
- **Land Info Spending Category:** Hardware

Business Drivers

- Need reliable equipment to run a successful land records modernization program

Objectives/Measure of Success

- Acquire new GPS equipment, scanner, computers, servers, tablets and printers as needed in land records office dedicated to land records modernization.

Project Timeframes

- 2022-2025

Responsible Parties

- Land Information, Planning & Zoning, ITS

Estimated Budget Information

- TBD

Project #12: Highway signs, Culverts, etc

Project Description/Goal

- GPS location of signs, culverts and other highway related infrastructure and tie to the mapped right-of-way.
- **Land Info Spending Category:** Other. Highway

Business Drivers

- The Highway Department program for culverts on State R/W and County is ready for collection.
- Sign inventory for safe travel
- DNR would like culvert locations on all roads for hydro modeling.

Objectives/Measure of Success

- All culverts and signs accounted for with proper attributes.

Project Timeframes

- Signs are completed, culverts 2022 – 2023

Responsible Parties

- Highway, Land Information

Estimated Budget Information

- TBD

Project #13: NGS 2022 Datum Change

Project Description/Goal

- New projection parameters determined for Oneida County coordinate system using the 2022 NGS Datum.
- **Land Info Spending Category:** Other. Control

Business Drivers

- NGS is adopting a new datum and while it is not known yet what vendors will do to accommodate the change there likely will be an impact.

Objectives/Measure of Success

- Efficient conversion of existing GIS data and control into new datum.

Project Timeframes

- 2022 – 2030 Depends on when NGS releases the Datum for official use.

Responsible Parties

- Land Information. County Surveyor, NGS advisor, DOT

Estimated Budget Information

- TBD

Project #14: Floodplain Map Data

Project Description/Goal

- To provide LiDAR data and Orthoimagery to state and federal agencies to update floodplain maps.
- **Land Info Spending Category:** Other. Floodplain

Business Drivers

- Inaccurate FEMA maps do not match current needs
- Accurate floodplains will reduce unnecessary delays for landowners wanting to improve their property and allow for better zoning administration

Objectives/Measure of Success

- Increase reliance on floodplain maps

Project Timeframes

- TBD

Responsible Parties

- FEMA, DNR, Planning & Zoning, Land Information

Estimated Budget Information

- TBD – Staff time to provide data to DNR who would likely spearhead the project

Project #15: Land Record Hardware–Software Updates/Maintenance

Project Description/Goal

- To stay current with hardware and software to continue day to day operations.
- **Land Info Spending Category:** Software – Hardware (Website Hosting)

Business Drivers

- Must pay maintenance fee and have stable software - hardware. Currently cost of Register of Deeds, Real Property-Tax Application and GIS maintenance is \$102,000 a year. Servers have a 4-7 year life.

Objectives/Measure of Success

- Systems up and running daily

Project Timeframes

Timeline – Project #1 Title		
Milestone	Duration	Date
Project #1 start	yearly	Jan 1 2022
Project complete	ongoing	ongoing

Responsible Parties

- ITS, Register of Deeds, Land Information, Planning & Zoning, Treasurer

Estimated Budget Information

- \$102,000 a year.

Project #16: ROD Index and Retrieval of Historic Transcript Books

Project Description/Goal

- The historic transcript deeds from adjoining counties that once encompassed Oneida are scanned but are not included in the electronic system for indexing or retrieval.
- **Land Info Spending Category:** Other Parcel Work

Business Drivers

- Increased efficiency in Register of Deeds in retrieving historic documents
- Cannot electronically access the documents from the indexing system

Objectives/Measure of Success

- Create an index consistent with the electronic tract index and tied to the imaging system

Project Timeframes

- 2022-2025

Responsible Parties

- Register of Deeds, ITS

Estimated Budget Information

- TBD, possible staff time.

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