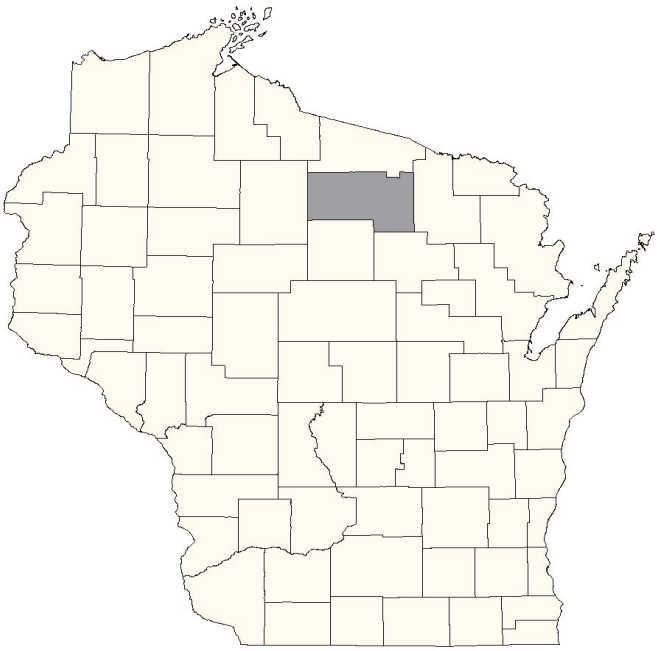
Oneida County Land Information Plan

2025-2027



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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 2023, Oneida County was awarded $71,000 in WLIP grants and retained a total of $72,360 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, Planning & Zoning, Land & Water Conservation, Forestry, Sheriff's Department 911 and NewWorld dispatch system, Economic Development, Emergency Services. They also provide 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 rights attributable to landowners.

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: 2052-2027

#1: Ongoing work towards completion of PLSS
#2: Maintain GIS Datasets
#3: Register of Deeds Electronic Tract Index Pre-1997
#4: Local Mapping Control
#5: Mobile Mapping Applications
#6: NewWorld GIS Integrations & NextGen911 Maintenance
#7: IMS Imaging Replacement
#8: UAV Technology
#9: NGS 2026 Datum Change
#10: Floodplain Map Data
#11: Land Records Servers/Software Updates & Maintenance
#12: ROD Index & Retrieval of Historic Transcript Books

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 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 currently uses the retained fees to pay maintenance costs for our larger land records hardware/software systems. The County used to be able to apply the remaining funds after maintenance fees towards land related projects. 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.

The Statewide Parcel Map Initiative

For Strategic Initiative grant eligibility, counties are required to apply WLIP funding toward achieving certain statewide objectives, specified in the form of "benchmarks." Benchmarks for parcel data—standards or achievement levels on data quality or completeness—were determined through a participatory planning process. Current benchmarks are detailed in the WLIP grant application, as will be future benchmarks.

WLIP Benchmarks

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

More information on how 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 WLIB 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	WLIB 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 proces; 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 planimetric 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
2022	Updated Web Mapping application; Created Broadband Mapping application; continued NextGen 9-1-1 involvement, uploaded GIS Addressing, Road Centerline, and County boundary data into State systems.
2023	Resurrected Trails project with area Chambers of Commerce. Contracted for 2024 Aerial Photography. Continued strong participation in Broadband Mapping and NextGen 911 projects.
2024	Acquire new countywide digital imagery with WROC program. Acquire updated LiDAR as part of the USDA/DOA/USGS project. Completed Trails project. Created mapping project for Chapter 980 of WI state statute.

County Land Information Plan Process

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

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

Plan Participants and Contact Information

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

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

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

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

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

Oneida County Land Information Council and Plan Workgroup				
Name	**Title**	**Affiliation**	**Email**	**Phone**
+ **Sara Chiamulera**	Land Information Director Land Information Officer	Land Information	schiamulera@oneidacountywi.gov	715-369-6179
+ **Tara Ostermann**	County Treasurer	Treasurer	tostermann@oneidacountywi.gov	715-369-6137
+ **Jacob Piasecki**	Real Property Lister/ Assessment Coordinator	Land Information	jpiasecki@oneidacountywi.gov	715-369-6179
+ **Mike Timmons**	County Board Member	County Supervisor	mtimmons@oneidacountywi.gov	715-369-4835
+ **Kyle Franson**	Register of Deeds	Register of Deeds	kfranson@oneidacountywi.gov	715-369-6150
+ **Ted Cushing**	Realtor	Realtor	Ted@vacationlandproperties.com	715-356-5887
+ **Jacob Simkins**	Public Safety Officer	Sheriff Department Emergency Government	jsimkins@oneidacountywi.gov	715-361-5191
Karl Jennrich	Planning and Zoning Director	Planning & Zoning	kjennrich@oneidacountywi.gov	715-369-6130
Michele Sadauskas	County Conservationist	Planning & Zoning	msadauskas@oneidacountywi.gov	715-369-7835
Jason Rhodes	ITS Director	Information Technology Services	jrhodes@oneidacountywi.gov	715-369-6103
Randy Boehlert	Geospatial Administrator	Land Information	rboehlert@oneidacountywi.gov	715-369-6179
Andy Faust	NCWRPC	Regional Planning	afaust@ncwrpc.org	715-849-5510
Alex Hegeman	Highway Commissioner	Highway Department	ahegeman@oneidacountywi.gov	715-369-6184
Jill Nemec	Forest Director	Forestry & Outdoor Recreation	jnemec@oneidacountywi.gov	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

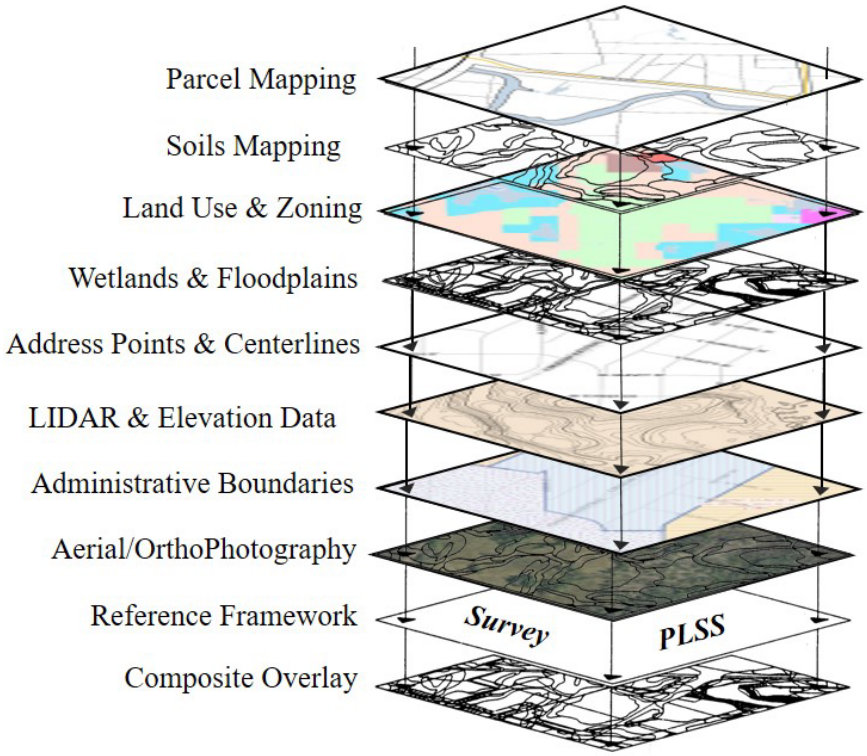
Counties must have a land information plan that addresses development of specific datasets or map layer groupings historically referred to as the WLIP Foundational Elements. Foundational Elements incorporate nationally-recognized "Framework Data" elements, the major map data themes that serve as the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

FOUNDATIONAL ELEMENTS

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

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

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.



PLSS

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	• 4,313
Number of PLSS corners capable of being remonumented in your county that **have been remonumented**	• 3,845
Number of remonumented PLSS corners with survey grade coordinates (see below for definition) • **SURVEY GRADE** – coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision • **SUB-METER** – point precision of 1 meter or better • **APPROXIMATE** – point precision within 5 meters or coordinates derived from public records or other relevant information	• 3,376 Survey Grade • 79 Sub meter • 484 Approx
Number of survey grade PLSS corner coordinates **integrated** into county digital parcel layer (see definition of PLSS integration on page 37)	• 3,376
Number of non-survey grade PLSS corners integrated into county digital parcel layer	• 937
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% • 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	• 398
Approximate number of PLSS corners believed to be lost or obliterated	• 374
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 *(Survey Grade + Calculated + Unknown)*	• Price: 48. Vilas: 142. Forest: 85. Langlade: 48. Lincoln: 87.
Number of PLSS corners remonumented along each county boundary *(Survey Grade + Calculated)*	• Price: 47. Vilas: 135. Forest: 61. Langlade: 37. Lincoln 82.
Number of remonumented PLSS corners along each county boundary with survey grade coordinates	• Price: 47 Vilas: 134 Forest: 61. Langlade: 37. Lincoln: 77.

Custodian

- Oneida County Land Information Office

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. Some of the numbers reported in above

table may 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, thus far, have been within approximately 0.10' of the originally determined value which demonstrates reliable procedures and equipment have been used to establish the values.
- Continue to file survey maps and update index.
- Continue to file field notes and other survey source documents.
- Accepting digital USPLSS tie sheets.

Standards

- Statutory Standards for PLSS Corner Remonumentation
  - s. 59.74, Wis. Stats. Perpetuation of section corners, landmarks.
  - s. 60.84, Wis. Stats. Monuments.
  - ch. A-E 7.08, Wis. Admin. Code, U.S. public land survey monument record.
  - ch. A-E 7.06, Wis. Admin. Code, Measurements.
  - s. 236.15, Wis. Stats. Surveying requirement.
- North American Terrestrial Reference Frame of 2022 (NATRF2022)

- SURVEY GRADE standard from Wisconsin County Surveyor's Association:
  - **SURVEY GRADE** – coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by 236.18(2), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision
  - **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. Reobervations 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 – Local Control

Maintenance

- WIDOT – HARN and Height Mod network
- Oneida County Land Information Office – 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: Esri Experience Builder** – hosted on ArcGIS Online, implemented and maintained in-house by County staff.

- **Unique URL path for each parcel record:** No. Parcel numbers are searching on mapping application.

Custodian

- Oneida County Land Information Office

Maintenance

- **Update Frequency/Cycle**. Parcel polygons are updated as survey maps (CSMs) are submitted (recorded) and deeds are recorded. Web mapping updates nightly.

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 meets their standards for acceptance. The 2023 submission was version 10 and Oneida County plans to adhere to future submission requirements.

Parcels Without Land Value

Layer Status

- **Number of parcels without a land value recorded to-date:**
  - As of 9-16-2024, zero (0) parcels without a land value have been recorded.
- **County geolocates/maps parcels for improvements only and without a land value by:**
  - Act 12 of 2023 amended sec. 70.17(1), Wis. Stats and removed the option of assessing improvements on leased land as personal property.
  - According to the Department of Revenue, state law provides two processes to list and value buildings, improvements, and fixtures that are on leased land, exempt land, forest cropland and managed forest land along with mobile homes not subject to a parking permit fee or otherwise exempt.
    a. Under sec. 70.03, Wis. Stats. – update the existing parcel's listing and value to include all buildings, improvements, and fixtures.
    b. Under secs. 70.17(3) or 70.27, Wis. Stats. – create a separate parcel for the buildings, improvements, and fixtures. Sec. 70.17(3) provides for a real property assessment with only an improvement value. Though Oneida County has not recorded any parcels for improvement only, we will proceed to create new polygons and parcel stacking. If this process does not work for the county we will look into the other processes.

Assessment/Tax Roll Data

Layer Status

- **Progress toward completion/maintenance phase:** NA
- **Tax Roll Software/App and Vendor name:** Ascent Land Records Suite – from contractor/vendor Transcendent Technologies, LLC. County creates the tax roll and runs and prints tax bills using the Ascent software for all munis except the city of Rhinelander.
- **Municipal Notes:** The City of Rhinelander prints their own tax bills, generated from the PDF tax roll supplied by the County LIO.

Custodian

- Oneida County Land Information Office / Real Property / 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 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 at https://www.oneidacountywi.gov/grantorgrantee/ All new entries are digital and can be accessed 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 pen dens, etc. The tract index is digital from 1995 to present and can be accessed 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 and can be accessed on line at: http://oneida.ncwrpc.info/ROD/
  The County would like to create a digital tract back at least 60 years.
- **Imaging:** Imaged all documents containing 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 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, CSMs
- 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:** 2022
- **Accuracy:** Meets USGS and ASPRS vertical accuracy standard of 10 cm RMSEz on non-vegetated surfaces and 29.4 cm at the 95th percentile for vegetated surfaces.
- **Post spacing:** average point density of 8 points per square meter (PPSM)
- **Contractor's standard, etc.:** Lidar base project deliverables were produced to meet USGS Lidar Base Specification 2021, Revision A, Quality Level 1.
- **Next planned acquisition year:** N/A
- **QL0/QL1/QL2 acquisition plans:** N/A

Custodian

- Oneida County Land Information Office

Maintenance

- Extract point cloud classifications and extract derivatives as needed

Standards

- Adheres to USGS Lidar Base Specification 2021, Revision A, Quality Level 1 and ASPRS Positional Accuracy Standards for Digital Geospatial Data, 2014.

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

- **Bare-Earth Digital Elevation Model (DEM):** Complete
- **Hydro-Enforced DEM:** Complete
- **Digital Surface Model (DSM):** Complete
- **Intensity Images:** Complete
- **Point Cloud:** Complete

- **Bare-Earth Elevation Contours (1ft):** Complete

Custodian

- Oneida County Land Information Office

Maintenance

- Extract point cloud classifications and extract derivatives as needed
- Adjust point cloud classifications as needed

Standards

- Adheres to ASPRS Positional Accuracy Standards for Digital Geospatial Data, 2014

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:** 2024
- **Resolution:** 6" pixel resolution, 4 band RGB-NIR
- **Contractor's standard:** Meets WROC and ASPRS Class II standards for horizontal accuracy of 1.4 feet RMSE
- **Next planned acquisition year:** 2028/2029
- **WROC participation in 2028/2029:** Plan to participate but subject to funding.

Custodian

- Oneida County Land Information Office

Maintenance

- Typically 5 years to coincide with WROC

Standards

- The 6-inch pixel 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 1.4-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

- 2024, Infra-red

Custodian

- Oneida County Land Information

Maintenance

- Typically 5 years to coincide with WROC

Standards

- See Imagery standards above.

Address Points and Street Centerlines

Address Point Data

Layer Status

- The County administers the countywide addressing and road naming ordinance. Address points are assigned to all buildings used for human occupation, as applied for by landowner/contractor. Other buildings are addressed as needed, i.e. separate utilities, garage only on a parcel, camping pads, etc.

Custodian

- Oneida County Land Information Office

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 NextGen 9-1-1 Data Standards

Other Types of Address Information

e.g., Address Ranges

Layer Status

- Address ranges maintained in Street Centerlines

Custodian

- Oneida County Land Information Office

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. The class of the road is an attribute, i.e. 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 Office

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.
- 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. Public right-of-ways have a ROW polygon associated with the road. If ownership is known, a tax parcel ID number is applied and the document to support the right-of-way is linked.
- **How maintained:** The Right-of-way layer is revised/maintained as part of parcel maintenance based on new survey or supporting documents.

Custodian

- Oneida County Land Information Office

Maintenance

- Daily

Standards

- Complies with the County GIS geodatabase design

Trails

e.g., Recreational Trails, Snowmobile Trails

Layer Status

- ATV/UTV Trails on County-owned lands are mapped. 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.
- Parks and recreational trail data on County-owned lands are maintained by the Forestry Department. PDF Maps for County Parks, Cross-Country ski trails, hiking, biking and other silent sports trails in the county forest can be accessed on County mapping site and Forestry webpage.
- Silent Sport recreational trails are being mapped in 2024 in combined project with the County Tourism Council. Once collected and edited, the LIO will display the trails in a Recreational web mapping application located here: https://oneida-county.maps.arcgis.com/apps/webappviewer/index.html?id=c1257031117a47c8967e981e9276a68f
- 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

- Forestry Department updates ATV/UTV trails layers as trails change and snowmobile clubs provide trail data. Some privately owned trails/parks are expected to update the County LIO with edits to trails. Land Information office posts trails to online web mapping applications.

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 Plan

Layer Status

- Plan administered by county but not in GIS format.
- **Year of certification:** 2002. We only have one farm in the County currently registered. Plan is being updated in 2025.

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 FEMA 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, they are to be submitted to the Land Information Office.

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

- County Land Information Office & City of Rhinelander Inspection department

Maintenance

- As municipal zoning changes are made, they are to be submitted to the Land Information Office. Last updated July 2021.

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 Rhinelander, Annexations

Maintenance

- All annexations are filed with the Land Information 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 to Legislative Technology Services Bureau yearly
- Land Information Office

Maintenance

- Boundaries are updated as annexations occur and when required by redistricting.
- 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 are 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 Management/Sheriff/Towns

Maintenance

As service area or location of facilities change, Land Information updates the data.

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, containing 2 PSAPs.

Custodian

- Emergency Management/Land Information

Maintenance

As service area or location of facilities change, Land Information updates data.

Standards

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

Provisioning Boundary

Layer Status

- Currently the provisioning boundary is the County boundary, with some boundary extensions based on road centerlines.

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 Management/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, 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 are 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 PLSS sections of land in the county that have Native American parcels and the parcel mapping carries an attribute to identify the tribal lands.

Custodian

- Land Information Office

Maintenance

- As needed

Standards

- County GIS standards

Other Administrative Districts

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

Layer Status

- 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 can be linked to the parcels geodatabase, and could be used to create a generalized map.
- County owned 'forest stands' used in the Forestry Department for management purposes.

Custodian

- Land Information Office

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
- 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.
- USGS Elevation-Derived Hydrography Specifications

Planimetric Layers

e.g., Impervious Surfaces, Building footprints

Layer Status
- COUNTYWIDE Building footprints of greater than 10 ft x 10 ft were last updated in 2019.
- 2019 - Buildings, edge of pavement, impervious surfaces, and unpaved driveways within a 500-foot lake and stream buffer.

Custodian
- Oneida County Land Information Office

Maintenance
- Potential to apply for NextGen911 Grants to update building footprints to coincide with 2024 acquired imagery.

Standards
- Internal to office & ASPRS Level 2 standards for 1" = 100' map scale. Features not visible at 1" = 100' map scale were not mapped.

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, Land Information Office

Maintenance
- As new towers are added, moved or removed.

Standards
- Complies with the County GIS geodatabase design.

Bridges and Culverts

Layer Status
- Culverts completed on County Roads.
- Bridges completed on Town and County Roads.
- Also completed on County Roads are catch basins, guard rails, snowmobile bridges, weight limit specifications, Adopt-a-Highway data

Custodian

- Highway Department, Land Information Office.

Maintenance

- Land Information Office and Highway Department. Updated as changes occur.

Standards

- Initial database design per DOT. Current Highway Dept standards.

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 by Planning & Zoning 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 complete
- AIS Aquatic and Invasive species inventories
- TIS: Terrestrial invasive species areas are mapped in project areas.

Custodian

- Land Information Office

Maintenance

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

Standards

- Complies with the County GIS geodatabase design.
-

Points of Interest

Layer Status

- Boat Landings & Campsites are combined into a point layer, intended for use by dispatch/Emergency Response.

Custodian

- County Land Information Office

Maintenance

- Layer is incomplete. Updates and further attribution is needed.

Standards

- Complies with the County GIS geodatabase design.

Broadband Project Mapping

Layer Status

- Planned and projected routes for Broadband Services in County. Mapped in conjunction with Oneida County Broadband Bug Tussel Project
- Radio towers, and City, Town, County public buildings

Custodian

- County Land Information Office

Maintenance

- Layer is edited as needed. Project is available here: https://oneida-county.maps.arcgis.com/apps/webappviewer/index.html?id=cca5ed8452494e6c81b13e3618ce07b0

Standards

- Complies with the County GIS geodatabase design.
- Attributes maintained to match project status and funding types.

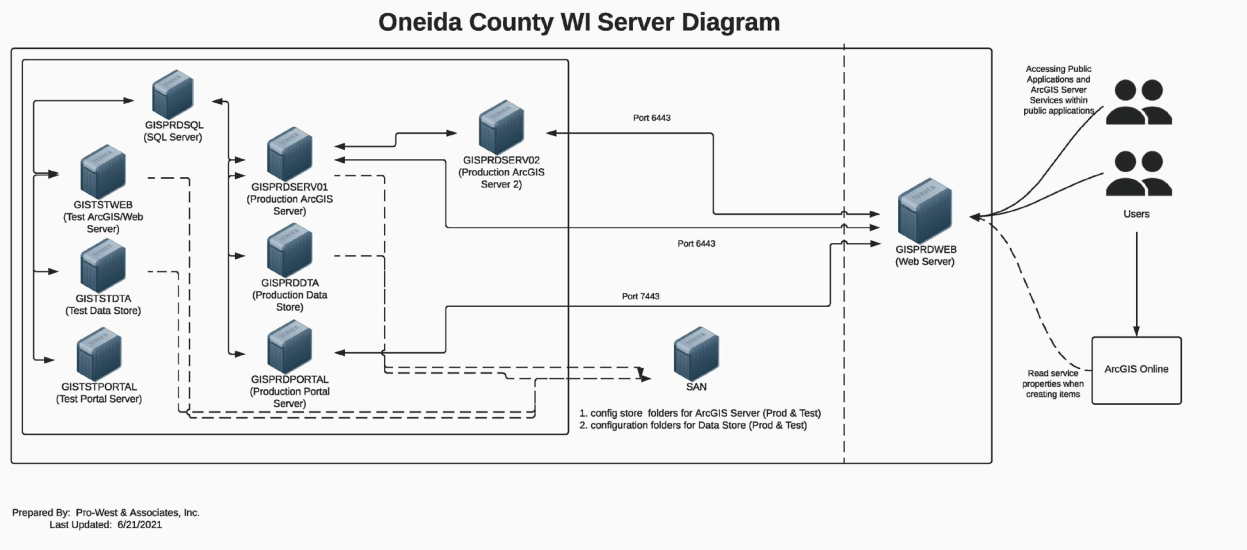
3 LAND INFORMATION SYSTEM

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.

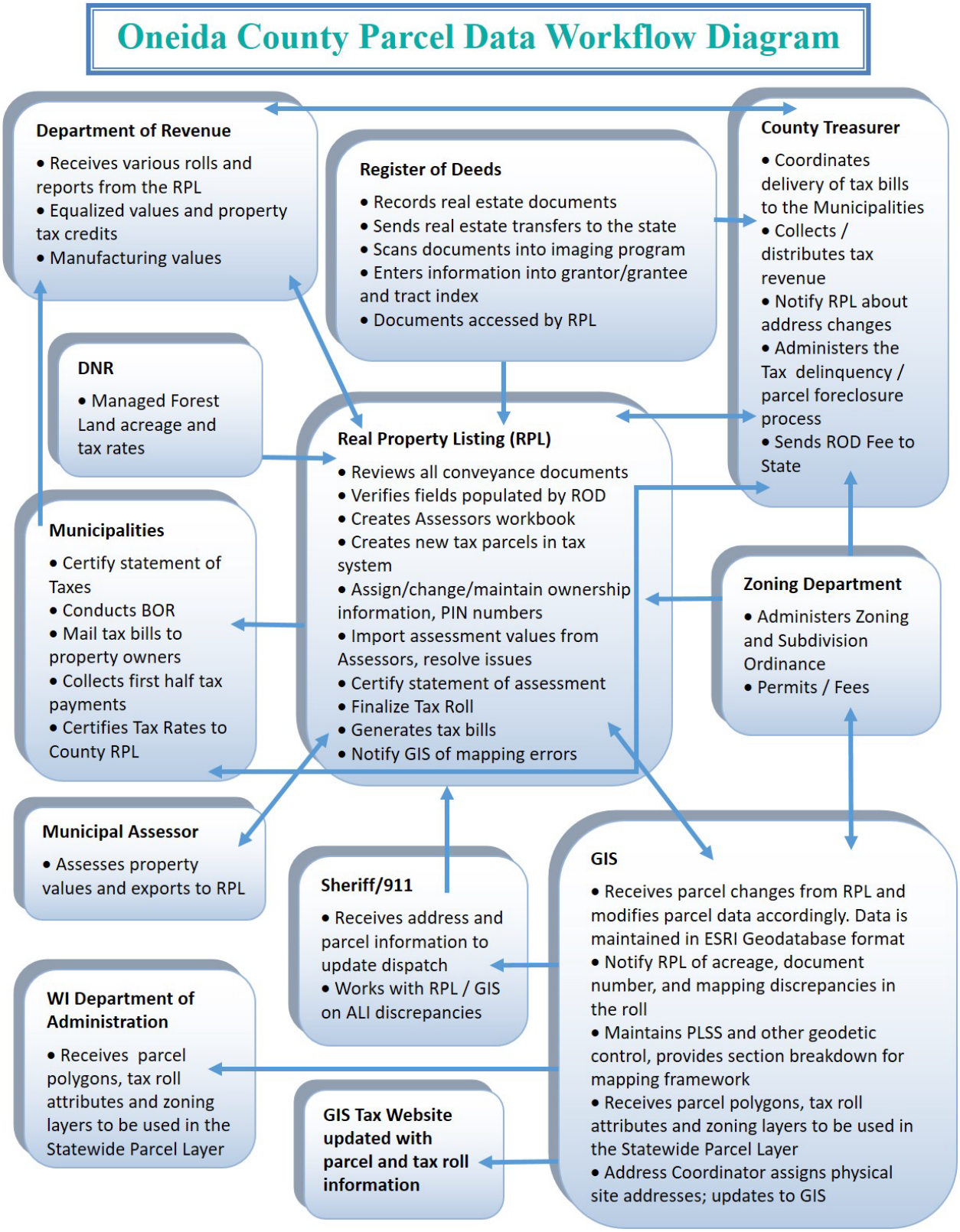
One integration requirement is listed under s. 16.967(7)(a)(1), Wis. Stats., which states that counties may apply for grants for:

- 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
- **County plans to upgrade to ArcGIS Pro:** Yes - limited use at this time, but complete upgrade/transition is planned in the next year or two, completed by 2027.

Website Development/Hosting

- Oneida County hosts all land records data on County systems. County maintains the GIS web mapping application using ArcGIS Online. Land records tax data can be accessed using Ascent Land Records Suite by Ttech. 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 some of our GIS layers including parcels and road centerlines. Due to recent upgrades, we lost a considerable amount of metadata, and are working to recreate 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. County does not have a formal metadata policy.

Municipal Data Integration Process

- County is the custodian for the county-wide real property system and tax bill creation. County is responsible for reviewing the deeds and updating the ownership data, i.e. owners name, mailing address, document, etc. County works with the municipality Assessors, Clerks, and Treasurers to obtain the assessment data from Assessors needed to create assessment rolls; and clerks and treasurers to produce tax bills and tax rolls.
- County maintains the county-wide address and master street guide for the 911 system; works with the municipality's addressing coordinator for placements of the address and road name signs.
- County has Comprehensive Shoreline Zoning and all municipalities come under this County zoning jurisdiction except the City of Rhinelander. The City provides City zoning, annexations, TIF districts and other boundary information to the County which is housed on the County's GIS system.
- 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 the County land records systems and they regularly use the mapping site.

Public Access and Website Information

Public Access and Website Information (URLs)

Web Services/REST End Points
URL
https://gis.co.oneida.wi.us/arcgis/services

County Webpage with Link to Statewide Parcel Map (www.sco.wisc.edu/parcels/data)
URL
https://gis.co.oneida.wi.us/gismapping/

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/gismapping/	https://docs.google.com/forms/d/e/1FAIpQLScDxdl8djcNkpJ8hadRThB06W3O45NPBFJmiXSPZ0vml181yw/viewform?c=0&w=1	https://ascent.co.oneida.wi.us/LandRepertyListing/RealEstateTaxParcel#/Sea	https://propertyrecords.co.oneida.wi.us/WEB/login.aspx?ReturnUrl=%2fWEB

Single Landing Page/Portal for All Land Records Data
URL
https://www.oneidacountywi.gov/departments/li/

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@oneidacountywi.gov and we will send you a temporary log in to download the data.
- Current Tax records data available as a county-wide export for $50.
- Customized digital data requests are handled through our Information Technology and Land Information Offices.
- Digital orthophotography is $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 purchased data. Email lio@oneidacountywi.gov 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

decreased in number. 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 Small Government Enterprise License Agreement (SGELA) has allowed for webinars and other 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.**

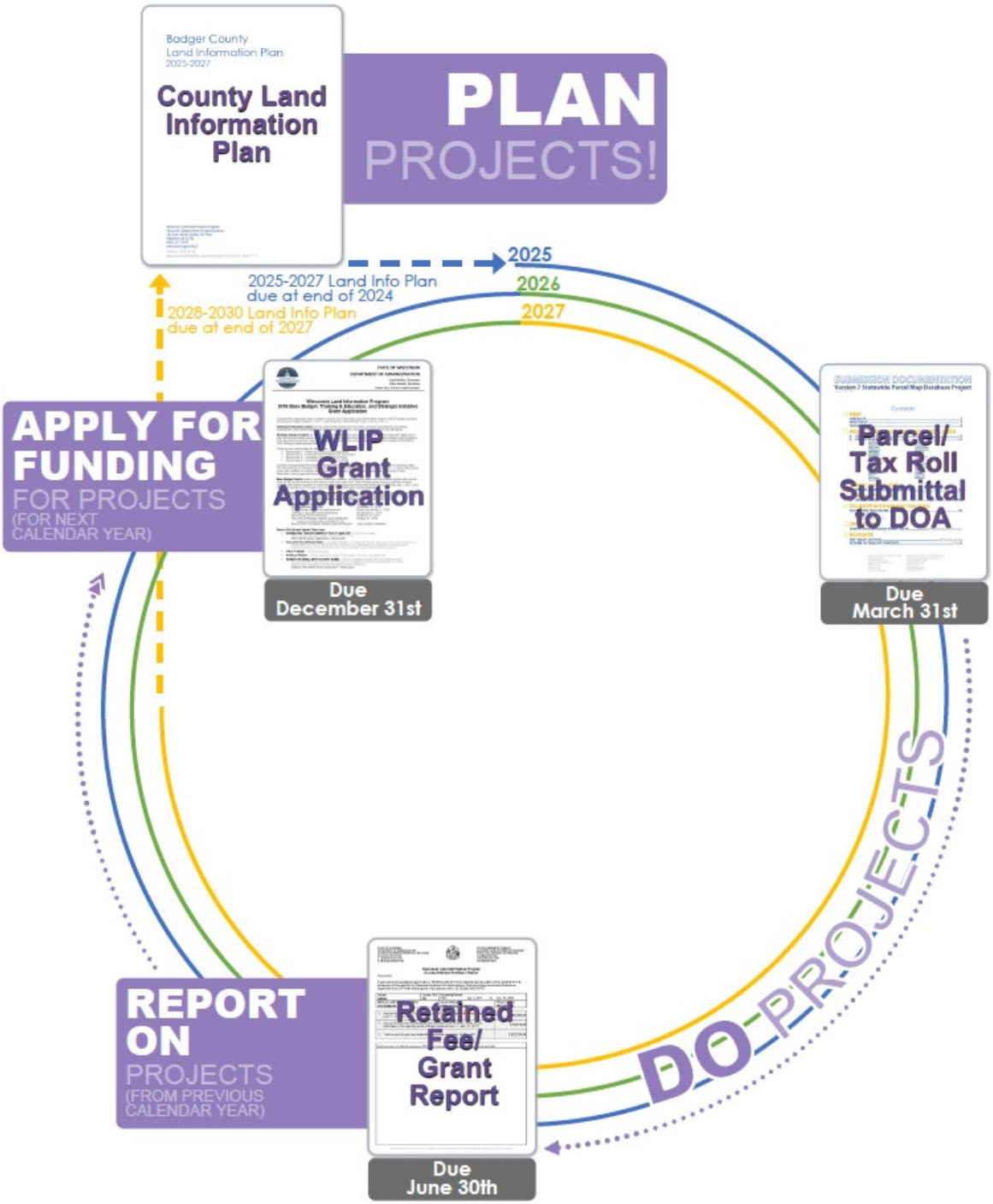


Figure 1. The WLIP Land Information Plan/Grant Project Cycle

Project Plan for PLSS (Benchmark 4)

Project Title: Project Plan for PLSS (Benchmark 4)

Project Description

Current Status

- See PLSS Layer Status table in Chapter 2.

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 sections. Work with local surveyors on a bulk contract base, as well as individual corner retrieval, depending on funding available.
- **Land Info Spending Categories**: PLSS
- PLSS Integration.
- **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, and these are not priority to the County acquisition plan.
- **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 corners as time permits. Many corners that are not captured yet are in County and State Forest. Of those, priority will go to corners next to and nearby private owned parcels. A large area of southeastern Oneida County is owned by The Conservation Fund's Pelican River Forest. These corners are not priority, and may not be necessary for completion due to the presence of a permanent conservation easement.

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. 96% of corners on the County boundaries are completed and the last 4% may be the lost, obliterated.

Business Drivers

- Completion and integration of PLSS will improve the geospatial accuracy of the parcel layer and other county land information system layers.
- 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.), the general public, as well as all County departments that rely on parcel mapping. All can access accurate property boundary information in searchable, digital format available on the web mapping application 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: **2036.**
- Number of corners to be remonumented and/or rediscovered by 2027 (at a rate of 70 corners per year): **210**
- Number to have new coordinates established by 2027: **210**
- Accuracy class for these new coordinates by 2027: **Survey Grade**
- Number of new corner coordinates to be integrated into the parcel fabric by 2027: **210**
- Number of new tie sheets to be posted online by 2027: **210**

Project Timeframes

- Oneida County will actively work with local surveyors, requesting and reimbursing them to retrieve corner data and supply survey grade coordinates and certifications for the remaining 772 (approximately) corners. Of this 772, 398 have corner certifications but no GPS; 374 have no data). From prior year estimation and dependent on funding, if we approximate 70 corners completed per year, we could be complete at the end of 2036.
- As that data/corner work is submitted to the County, it will be integrated into the parcel mapping, and we will then be considered in maintenance mode.

Responsible Parties

- Land Information Office; Local Land Surveyors

Estimated Budget Information

- See table at the end of this chapter (for budget information for the planning period 2025-2027).
- Estimated remaining cost for completion and integration of PLSS (to reach maintenance mode): $386,000
  - Estimated approximate average cost of remonumentation per corner: $500
  - Total cost of remaining remonumentation: $386,000
  - Total cost of remaining integration of PLSS points into parcel layer: Variable; Staff time as corners come in.
  - Cost of anything else remaining: Variable; Staff time as corners come in
  - Total remaining cost: Estimating $400,000
- Estimated approximate average cost of remonumentation per corner can be a rough estimate.
- The costs to complete and integrate PLSS ~~may~~ DOES extend beyond the planning period of 2025-2027.

Project #1: 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

- See Table page 39.

Project #2: 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

- See Table page 39.

Project #3: 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

- See Table page 39.

Project #4: Mobile mapping Apps

Project Description/Goal

- Maintain mobile mapping applications and update as technology shifts.
- Potentially creating new apps for County Departments as requested and needed.
- **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 2025 - 2027

Responsible Parties

- Land Information, ITS, Consultants

Estimated Budget Information

- See Table page 39.

Project #5: NewWorld GIS Integration & NG911

Project Description/Goal

- Continue to maintain GIS data for 911 dispatch services and 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

- County is currently live with NextGen911 and continuing data clean-up
- 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

- 2025 - 2027

Responsible Parties

- Sheriff, Emergency Government, Land Information, ITS

Estimated Budget Information

- See Table page 39.

Project #6: IMS Imaging Replacement

Project Description/Goal

- Replace imaged document retrieval with PDF capabilities.
- **Land Info Spending Category:** Other Parcel Work

Business Drivers

- Contractors being able to retrieve data 24/7
- Increase efficiency of Document Retrieval for multiple County departments and the public.

Objectives/Measure of Success

- Online application systems able to retrieve documents.

Project Timeframes

- 2024 - 2026

Responsible Parties

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

Estimated Budget Information

- See Table page 39.

Project #7: 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

- 2024 - 2030

Responsible Parties

- Land Information, Sheriff, Forestry, Zoning, ITS

Estimated Budget Information

- See Table page 39.

Project #8: NGS 2026 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

- 2025 – 2030 Depends on when NGS releases the Datum for official use.

Responsible Parties

- Land Information, NGS advisor, DOT

Estimated Budget Information

- See Table page 39.

Project #9: 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

- See Table page 39.

Project #10: Land Records Servers/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

- 2025 – 2027
- Server replacement anticipated for 2025/2026

Responsible Parties

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

Estimated Budget Information

- See Table page 39.

Project #11: 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

- See Table page 39.

Completed Projects

Below is a list of projects that have been completed since the Oneida County Land Information Plan was updated for 2022 - 2024:

- Upgrade GPS Equipment, Scanners, Large format printers, etc.
- Highway signs, Culverts, etc – creation of multiple GIS layers for County Highway maintenance
- Replacement of Real Property & Tax System (Switch from County-run AS400 to Transcendent Technologies Ascent Land Records & Permitting Suite
- Acquired 2024 Orthoimagery in coordination with the WROC Program
- Register of Deeds Land Records Management System transition off AS400

Estimated Budget Information

Estimated Budget Information

Project Title	Item	Unit Cost/Cost	Land Info Plan Citations Page # or section ref.	Project Total
Project #1: Maintain GIS Datasets	LIO GIS staff positions	Variable	Page 34	Unknown
Project #2: Register of Deeds Electronic Back Indexing Pre 1995	Contractor/ROD/LIO Staff		Page 34-35	$200,000
Project #3: Local Mapping Control	LIO staff or contracting for data with local surveyors	$5,000	Page 35	$5,000
Project #4: Mobile mapping Apps	LIO GIS staff positions	$10,000	Page 35	$10,000
Project #5: NewWorld GIS Integration & NG911	LIO GIS staff positions/Sheriff's Dept	Variable	Page 36	unknown
Project #6: IMS Imaging Replacement	Contractor/IT	$5,000 for ROD records Tentatively $20,000 for P&Z, LIO, Treasurer, etc	Page 36	$25,000
Project #7: UAV Technology	LIO GIS staff positions/Sheriff's Dept		Page 36	unknown
Project #8: NGS 2026 Datum Change	LIO GIS staff positions	$10,000	Page 37	$10,000
Project #9: Floodplain Map Data	LIO GIS staff positions/Contractor	$5,000	Page 37	$5,000
Project #10: Land Records Servers/Software Updates & Maintenance	LIO/ROD/IT	2 Servers approx. $40,000 each Maintenance $120,000+ Annually	Page 38	$200,000
Project #11: ROD Index and Retrieval of Historic Transcript Books	Contractor/NWRPC/LIO & ROD Staff	$50,000	Page 38	$50,000
			GRAND TOTAL	**$505,000**

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

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