

**FINAL DUNN COUNTY (last updated 02/02/2016)  
LAND INFORMATION MODERNIZATION PLAN  
2015-2018**

**EXECUTIVE SUMMARY**

**About this Document.** This document is a land information plan for Dunn County prepared by the land information officer (LIO) and the land information council. By Wisconsin statute, “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 2015, Dunn County received \$50,896 in WLIP grants and retained a total of \$44,296 local register of deeds document recording fees for land information. Beginning in 2016, WLIP Strategic Initiative grants are projected to increase the county land information budget by \$50k per year.

This plan lays out how funds from grants and retained fees will be prioritized. However, as county budgets are determined on an annual basis with county board approval, this plan provides estimated figures that are subject to change and are designed to serve planning purposes only.

**Land Information in Dunn County.** Land information is central to county operations, as many essential services rely on accurate and up-to-date geospatial data and land records. A countywide land information system supports economic development, emergency planning and response, and a host of other citizen services. The Dunn 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, Dunn County’s Land Information Office strives to be recognized for its exceptional web mapping site, gains in governmental efficiencies by broadening the utilization of GIS, improvements in parcel

mapping accuracy, and responsiveness to meeting the land records needs of residents and businesses.

Land Information Office Projects. To realize this mission, in the next three years, the county land information office will focus on the following projects: (also see the designated section for new projects later in this document)

1. Indexing of documents by geography in GIS including the public land survey system (PLSS) corner record reports (tiesheets) for availability to private surveyors and the general public. (e.g. select, view and download tiesheets on line)
2. Improvement of the countywide integration of tax/assessment data with parcel polygons (Act 20)
3. Continued progress within the PLSS remonumentation program; achieving survey grade GPS coordinates as directed by the County Surveyor's Office.
4. Expansion of the use of mobile GPS/GIS technology especially within the zoning department and public health department as it relates to the septic and well inspection/inventory program.
5. Website development and hosting for improved access to land records. Explore the possibility of contracting a certain part of the GIS mapping for more a more consistent public access experience.
6. Updating and maintaining the E911 mapping and dispatch system.

# 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
- Meet a June 30, 2017 deadline to post certain types of parcel information online

Any grants received and fees retained for land information through the WLIP must be spent consistent with the county land information plan. The Uniform Instructions for Preparing County Land Information Plans are designed as a template, but leave flexibility as to how counties may choose to address the minimum plan components. The county is able to include as much detail as necessary to make the planning process useful at the local level.

## **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 proposed that funding be made available to counties in the form of Strategic Initiative grants to be prioritized for the purposes of parcel dataset improvement. For Strategic Initiative grant eligibility, counties will be 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—are determined through a participatory planning process and will be detailed in future WLIP grant applications.

## **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 16.967(1)(b)

County land information plans were initially updated every five years. However, as a result of Act 20, counties must update and submit their plans to DOA for approval every three years. Thus, the minimum planning horizon for these documents is three years. The plan may incorporate a planning horizon that is longer if the needs and priorities of the participants warrant.

The first post-Act 20 required update deadline for draft county land information plans is December 29, 2015. Final plans are due March 31, 2016.

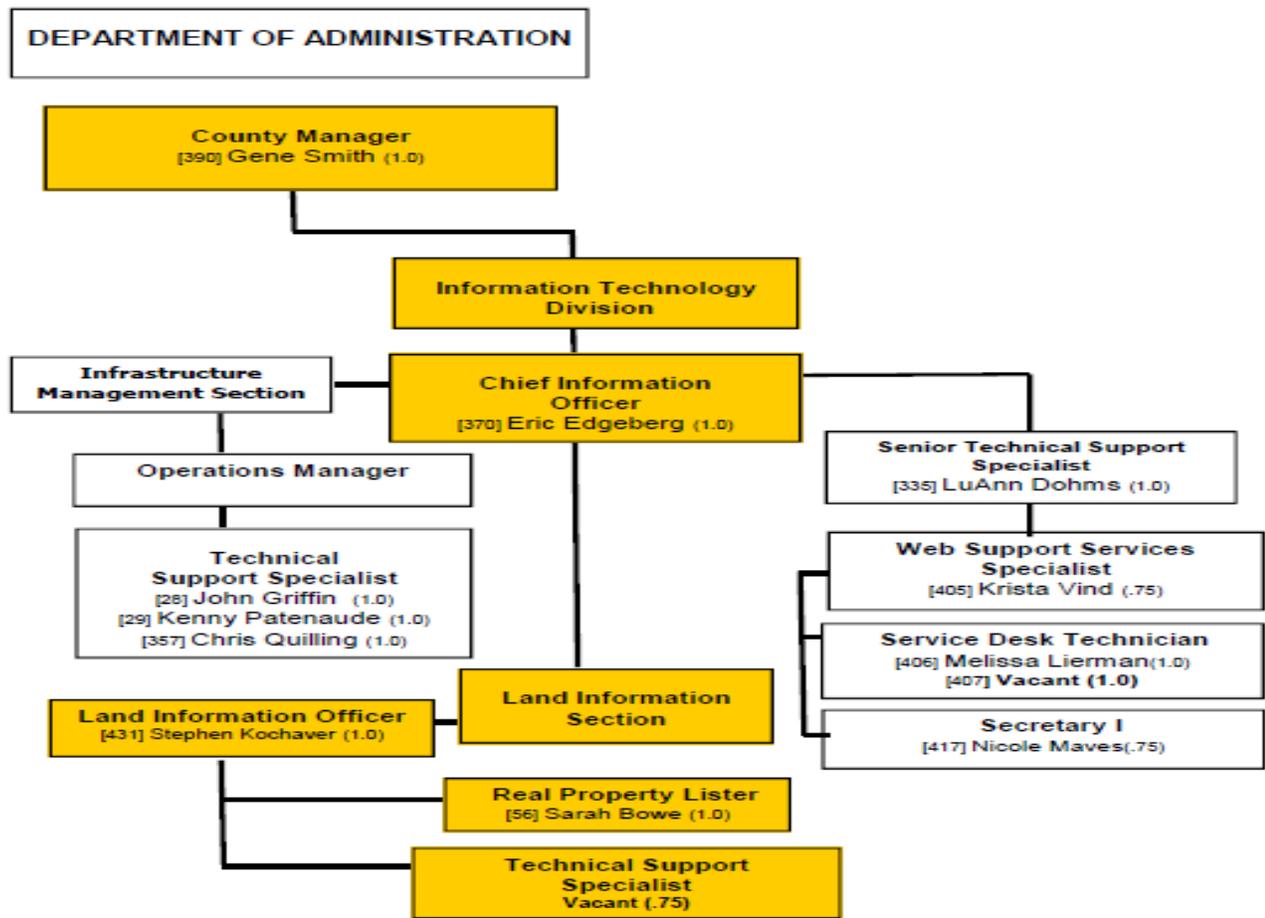
## County Land Information Plan Timeline



## County Land Information System History and Context

Dunn County has a rich tradition of land records, spanning across many departments, over the last 3 decades. In the mid, to late, 1990's the Dunn County land records program was primarily driven by the real property, surveying, zoning and land conservation departments. As the county advanced in its computer and database networking and storage functionality, the county electronic data processing (EDP) department became more of an integral part of the modernization plan that was being developed. In 2006, a newly dedicated geographic information systems (GIS) specialist position was created and placed within the management information systems (MIS), formerly EDP, computer department. The technical, fast changing and growing profession of GIS and the land information field made MIS a logical home for this new position.

Now, over 8 years later, after many retirements, department restructuring/relocations, and personnel changes, that GIS position has evolved into the land information officer (LIO) position (within the land information section), as a division of the information technology (IT), formerly MIS, department, and under the direction of the department of administration. (Current organization chart showing land records structure hierarchy)



## 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. A record documenting county land information council approval should be included in the final submission of the plan to DOA. County board approval of plans is encouraged but not required.

A county may amend a plan with updates or revisions as appropriate. If amended, a digital copy of the amended plan and record of land information council approval should be sent to the WLIP.

This plan was prepared by the county LIO, with input from the Land Information Council, and others as listed below.

<b>County Land Information Council and Plan Workgroup</b>				
<b>Name</b>	<b>Title</b>	<b>Affiliation</b>	<b>Email</b>	<b>Phone</b>
*Steve Kochaver	Land Information Officer	Dunn County Land Information Office	skochaver@co.dunn.wi.us	715-231-6517
*Megan Mittlestadt	Treasurer	Dunn County treasurers Office	mmittlestadt@co.dunn.wi.us	715-232-3789
*Sarah Bowe	Real Property Lister	Dunn County Land Information Office	sbowe@co.dunn.wi.us	715-231-6517
*Steven Rasmussen	County Board Member (Chair)	Dunn County Board of Supervisors	sasmussen@co.dunn.wi.us	715-231-6405
*Heather Kuhn	Register of Deeds	Dunn County Register of Deeds Office	hkuhn@co.dunn.wi.us	715-232-1228
*Rich Ellefson	Realtor			
*Melissa Gilgenbach	E911 Director	Dunn County E911 Emergency Services	mgilgenbach@co.dunn.wi.us	715-231-2982
*Thomas Carlson	County Surveyor	Dunn County Environmental Services Department	tcarlson@co.dunn.wi.us	715-231-6526
Eric Edgeberg	Dunn County CIO	Dunn County IT Department	eedgeberg@co.dunn.wi.us	715-231-6517
*Robert Walter	County Board Member	Dunn County Board of Supervisors	rwalter@co.dunn.wi.us	
*Jerome Prochnow	County Board Member	Dunn County Board of Supervisors	jprochnow@co.dunn.wi.us	
*David Bartlett	County Board Member	Dunn County Board of Supervisors	dbartlett@co.dunn.wi.us	

\* Land Information Council Members designated by asterisk

## **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 by users 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, the Uniform Instructions place 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.

The list of WLIP’s Foundational Elements has evolved with each update of the county land information plan instructions. They are a guideline of what counties need to address in their plans at a minimum. As the list of layers in this document is not exhaustive, counties are welcome to insert additional layers for geospatial data categories stewarded by the county or municipalities that are of importance to local business needs.

### **Foundational Element Subheadings**

For each layer listed under a Foundational Element, the plan should address: 1) Layer Status, 2) Custodian, 3) Maintenance, and 4) Standards.

## **PLSS**

### **Public Land Survey System Monuments**

#### Layer Status

- For the PLSS Foundational Element, the table below documents Layer Status

<b>PLSS Layer Status</b>	
<b>Name</b>	<b>Status/Comments</b>
Total number of PLSS corners (section, ¼, meander) set in original government survey	2,800
Number and percent of PLSS corners that have been remonumented	2,671 or 95%
Number and percent of remonumented PLSS corners with survey grade coordinates (see below for definition)	2,175 or 78%
Number and percentage of survey grade PLSS corners integrated into county digital parcel layer	1,975 or 71%
Number and percentage of non-survey grade PLSS corners integrated into county digital parcel layer	Although there are some “picked” positions from aerial photos, no “non-survey” grade PLSS corners are used.
Percentage of PLSS corners that have digital tie sheets (whether or not they have corresponding coordinate values)	2,671 and 100% of those having tiesheets
Digital tie sheets available online? Yes or No	Not yet/Pending project
Approximate number of PLSS corners believed to physically exist based on filed tie-sheets or surveys, but do not have coordinate values	500 +/-
Approximate number of PLSS corners believed to be lost or obliterated	According to the County Surveyor, this item is too vague to report
Total number of PLSS corners along each bordering county	256 total Breakdown as follows ; Barron 49; Chippewa 51; Eau Claire 27; Pepin 51; Pierce 25; St. Croix 52; Polk 1;
Number and percent of PLSS corners remonumented along each county boundary	Barron 47 or 96%; Chippewa 45 or 88%; Eau Claire 27 or 100%; Pepin 48 or 94%; Pierce 25 or 100%; St. Croix 49 or 94%; Polk 1 or 100%
Number and percent of remonumented PLSS corners along each county boundary with survey grade coordinates	Barron 31 or 66%; Chippewa 34 or 76%; Eau Claire 20 or 74%; Pepin 33 or 69%; Pierce 25 or 100%; St. Croix 40 or 82%; Polk 1 or 100%
Does your county collaborate with or plan to collaborate with neighboring counties for PLSS updates on shared county borders?	We have and continue to do so. Pierce County and Polk being the only Counties with 100% completion.

- Custodian(s)
- Under the partnership and direction of Thomas P. Carlson, P.L.S. (Dunn County Survey Office) and Steve Kochaver P.L.S., land information section.
- The Survey Division is part of the **Dunn County Environmental Services Department**. The County Surveyor reports to the County Administrator and to the governing **Planning, Resources and Development Committee**.

Duties Include: (See **Appendix “B”** for Wi. State Statute 59.45)

Re-establishes, perpetuates and maintains the corners of the Public Land Survey System (PLSS)

Files, indexes and maintains copies of all survey records in the county and provides copies upon request.

Acts as an approving authority by reviewing Certified Survey Maps and Plats for compliance with Chapter 236 of the Wisconsin Statutes, Chapter A-E 7 of Wisconsin Administrative Code and Chapter 16, Dunn County Subdivision/Condominium Ordinance and makes recommendations to the County Planning, Resources and Development Committee.

Assists private surveyors and others with research of the survey records and provides copies of all records upon request.

Provides technical and/or professional assistance to the general public and other County departments and committees concerning issues related to land ownership and/or location.

Executes all surveys that are required by the County or by a court.

Assists with the development, implementation and maintenance of the county geodetic control network and provides data for the creation and maintenance of the county Geographic Information System (GIS) for accurate county parcel mapping and taxation.

Serves as a member of the Land Information Council

#### Maintenance

- Under the partnership and direction of Thomas P. Carlson, P.L.S. and Steve Kochaver, P.L.S.
- Maintenance duties are still to be determined. There has not been a good working relationship between GIS and surveying since the mid 2000’s when GIS broke away from surveying/zoning/rpl. It is the intent of this land information officer to rebuild that relationship so our departments can collaborate constructively to best serve the constituents of Dunn County.

#### 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 requirements.

- Wisconsin County Surveyor’s Association survey grade standard: Coordinates collected under the direction of a Professional Land Surveyor, in a coordinate system allowed by [s. 236.18\(2\)](#), and obtained by means, methods and equipment capable of repeatable 2 centimeter or better precision.

## Other Geodetic Control and Control Networks

### HARN/ Height Modernization Stations

#### Layer Status

- HARN (High Accuracy Reference Network and Height Modernization Stations)

HARN Layer Status	
Name	Status/Comments
Total number of HARN Stations originally set by the County in 1993.	103
Total number of HARN Stations that are still existing and usable	91
Total number of Height modernization Stations originally set by the State in 2012(? check dates?)	76 (26 could be used as HARN Stations)
Total number of Height modernization Stations that are still existing and usable	76 (26 could be used as HARN Stations)

#### Custodian(s)

- Under the partnership and direction of Thomas P. Carlson, P.L.S. (Dunn County Survey Office) and Steve Kochaver P.L.S., land information section.

#### Maintenance

- Maintenance duties are still to be determined. There has not been a good working relationship between GIS and surveying since the mid 2000’s when GIS broke away from surveying/zoning/rpl. It is the intent of this land information officer to rebuild that relationship so our departments can collaborate constructively to best serve the constituents of Dunn County.

#### Standards

- This is an archival and informational layer only. No monuments are being set at this time. This layer provides the private surveyors, and other geospatial professionals, with a good visual guide as to where the stations are located, as well as providing the published coordinates associated with said marks.

### Parcel Mapping

#### Parcel Geometries

##### Layer Status

- Dunn County is moving toward Version 2 of the Statewide Parcel Layer. We are currently working with IT and other departments, to create an export version of this dataset. The State requirements are rigorous, and will require time and effort, on our part, for us to become compliant. This will be one of our larger projects for 2016 and beyond. Since our tax assessment data does not directly integrate with the polygon GIS model, we rely on our IT division to help migrate and manipulate this data. Of course, they are understaffed and very busy with a variety of large and critical enterprise County wide projects at the time of this writing.

- In 1999, Dunn County contracted for the development of digital base layers including a rural parcel layer. This layer serves as the foundation of our GIS parcel database. In 2004, Dunn County contracted to complete the County's parcel layer by adding all urban areas. The project was funded by the WLIP 2002 Strategic Initiative Grant for completing parcel mapping. Since March of 2006 the digital base layers have been edited, maintained and updated, in house, by the land information section of the IT department. Currently, Dunn County has a complete representation parcel layer as defined by the WLIA Parcel Standard with 20% (more or less) of the approximately 35,000 parcels derived by coordinate geometry and tied to geodetic control. The line work is not recommended for surveying, boundary location, and/or engineering purposes. Dunn County is in the planning phase of developing a cadastral parcel mapping as defined by the WLIA Parcel Standard. Our current remonumentation situation allows full cadastral mapping only in those sections with 100% of the PLSS corners defined. (See foundational element PLSS.) Dunn County uses a unique computer number identifier (PIN; See **Appendix "C"**.) for each parcel. Once the parcel data is migrated to the existing tax system (Xerox/ACS) a state defined unique PIN number will be implemented. The entire countywide parcel dataset is updated twice a month and then updated to the Dunn County GIS website for public availability. <http://216.222.161.54/DunnCoGIS/default.aspx>
- Projected Coordinate System:  
 NAD\_1983\_HARN\_WISCRS\_Dunn\_County\_Feet  
 Projection: Transverse\_Mercator  
 False\_Easting: 170000.00100000  
 False\_Northing: 0.01000000  
 Central\_Meridian: -91.89444444  
 Scale\_Factor: 1.00004103  
 Latitude\_Of\_Origin: 44.40833333  
 Linear Unit: Foot\_US  
 Geographic Coordinate System: GCS\_North\_American\_1983\_HARN  
 Datum: D\_North\_American\_1983\_HARN  
 Prime Meridian: Greenwich  
 Angular Unit: Degree
- The Dunn County parcel polygon model uses the unique PIN number to merge with a designed set of outputted data from the tax/assessment (Xerox/ACS) data system. Although there is not a direct relationship between the GIS polygon dataset and the tax/assessment data, the tax data being merged is fresh (usually a day old) and represents any changes/edits/ownership transfers/splits, up to the date of the merge, that were made in said tax/assessment system.
- The item to be addressed is stated: "Specify whether you use or plan to implement the Esri Parcel Fabric Data Model, and/or Esri's Local Government Information Model"
- My opinion is that we need more cooperation with the surveyor department before that can happen. I investigated the work it would take to bring our parcel layer into the fabric, even though there are only still about 78% of the PLSS corners with survey grade coordinates, and will summarize. We would have to drastically change our current processes to be compliant with the strict parameters of the ESRI parcel fabric model. We would need a better enterprise GIS setup in our County to share survey, and other data, with the LIO or GIS

technician. This may include ArcSDE and ArcGIS online. This would also include the current Real Property Lister becoming an integral part of the entire process. It may behoove the County to explore the option of contracting this migration to a parcel fabric from an outside source. I will add that, as previously mentioned, our current parcel layer has been created from an array of different methods. The fact that we tie one parcel corner to two known PLSS monuments, and then “slide” the rest of the adjoining parcels along for the ride, should not give the end user the notion they are now dealing with a cadastral map. There are no current plans to use ESRI’s Local Government Information Model.

#### Custodian

- Our current process requires the LIO/GIS specialist (currently one in the same) to tend to the polygon and PIN numbering element of the parcel polygon model within the ESRI ArcMap (v. 10.1) environment. The real property lister is responsible for the tax/assessment data within our Xerox/ACS (assessment office v. 8.6) software suite. As mentioned before, the assessment/tax data is then exported out to a designed .txt file and merged, by unique PIN, to the current polygon layer to complete the GIS parcel dataset distributed for public use.

#### Maintenance/History

- Dunn County has expended a large amount of time and money developing its assessment and tax system into a land information management system that provides the source information for the County’s Geographic Information System (GIS). The system is the largest and most up-to-date source of land records information in the County. Dunn County participated with Eau Claire County in its RFP process for replacement of the mainframe system with a modern client/server and relational database based system. Xerox/ACS, Inc. was selected as the vendor, and contingency funds were requested and approved in 2006 to purchase the software. Funds were budgeted for 2007 for implementation services and training. IT, Assessment, Treasurer, and Eau Claire County staff participated in both introductory and advanced training on the configuration, administration, customization, and maintenance of the system. After three years of development the Assessment Office and Billing and Collection portion of the Xerox/ACS system went into production in Eau Claire County in 2010. Dunn County has now fully implemented the Xerox/ACS software suite as well. Eau Claire County is developing the Land Development Office portion of the system and Dunn County will review that product as it moves forward. Current Dunn County project plans have the Land Development Office (LDO) implementation scheduled for 2016.
- Dunn County uses state of the art HP disk based server technology, to accommodate and back up the County GIS and land records databases. (Currently backing up twice a day.) Datasets are created and maintained in a dynamic GIS environment. Some users require shapefiles, while others prefer file or personal geodatabases. Continuing and updated support and enterprise license agreements with ESRI allow Dunn County the most recent and up to date versions of all software used including ArcGIS On Line, ArcGIS Server (v.10.0), and ArcGIS desktop (v. 10.1.)
- Continuing support with our AutoDesk vendor also allows a current software platform for our surveying and engineering customers. A migration to a different COGO/Surveying software (Carlson) is scheduled as a project for 2016. Since

the GIS division is housed in the Information Technology Department, it allows us to keep on the cutting edge of the hardware technology, as well as providing an excellent in house resource for any IT related issues.

- For archival purposes a parcel dataset (shapefile) is stored quarterly, per year. This gives us a good snapshot of the taxation and ownership at the date the parcel feature class was produced. (The naming designation of the layer indicates the date of production. e.g. GISParcel01012015.)

## Standards and Documentation

- Parcel Layer Data Dictionary

<b>FIELD NAME</b>	<b>DESCRIPTION</b>
FID	STANDARD ESRI INDEXING FIELD NOT USED FOR OUR PURPOSES
Shape	STANDARD ESRI GEOMETRY FIELD INDICATING A POLYGON FOR EACH PARCEL
OBJECTID	STANDARD ESRI OBJECT ID INDEXING FIELD NOT USED FOR OUR PURPOSES
PIN	UNIQUE COUNTY PARCEL INDEX NUMBER
COMPUTER_NO	OLD OR ALTERNATE COMPUTER NUMBER (NOT MAINTAINED)
OWNER_NAME	COMBINATION OF FIRST AND LAST NAME FIELDS
FIRST_NAME	FROM FIRST NAME IN TAX DATABASE
LAST_NAME	FROM LAST NAME IN TAX DATABASE
STREET	THE TAX MAILING ADDRESS
CITY	THE TAX MAILING CITY
STATE	THE TAX MAILING STATE
ZIP	THE TAX MAILING ZIP CODE
PAR_ADDRESS	THE PHYSICAL, OR SITUS, ADDRESS
PAR_ZIP_CODE	THE PHYSICAL, OR SITUS, ZIP CODE
PAR_OCCUPANCY	A LEGACY FIELD USED TO INDICATE OCCUPANCY (1=YES;0=NO)
PAR_FIRE_NO	PULLS OUT THE FIRE NUMBER OR HOUSE NUMBER FROM SITUS ADDRESS
PAR_STREET_INDEX	A LEGACY FIELD THAT USED TO INDICATE STREET TYPE
ZONING1	PRIMARY ZONING DESIGNATION ASSIGNED TO THE PARCEL <b>See Appendix "D"</b>
ZONING2	SECONDARY ZONING DESIGNATION ASSIGNED TO THE PARCEL <b>See Appendix "D"</b>
ZONING3	TERTIARY ZONING DESIGNATION ASSIGNED TO THE PARCEL <b>See Appendix "D"</b>
MUN_NO	UNIQUE NUMBER IDENTIFYING THE MUNICIPALITY
SECTION	PLSS SECTION NUMBER
TOWN	PLSS TOWNSHIP NUMBER (NORTH OF THE INITIAL BASE LINE)
RANGE	PLSS RANGE NUMBER (WEST OF THE 4TH PRINCIPAL MERIDIAN)
LEGAL_DESC	THE "TAX" LEGAL DESCRIPTION FROM THE ASSESSMENT DATABASE
LEGAL_ACRES	THE ACREAGE FIELD FROM THE ASSESSMENT DATABASE
SCHOOL_DIST	THE UTA CODE (OR SCHOOL DISTRICT CODE) FROM THE ASSESSMENT DATABASE
SCHOOL_CODE	THE UTA CODE (OR SCHOOL DISTRICT CODE) FROM THE ASSESSMENT DATABASE
DISTRICT1	LEGACY FIELD THAT USED TO CONTAIN THE SUPERVISORY DISTRICT NUMBER
DISTRICT2	LEGACY FIELD THAT USED TO CONTAIN THE SUPERVISORY DISTRICT NUMBER
COMPUTER_ALPHA	LEGACY FIELD THAT WAS USED TO INDEX BY SECTION TOWN AND RANGE
PIN_KEY	LEGACY FIELD THAT WAS USED TO INDEX BY SECTION TOWN AND RANGE
HISTORY	LEGACY FIELD THAT CONTAINS DEED REFERENCES (VOL/PAGE) AND NOTES
PAR_NUMBER	LEGACY FIELD THAT WAS UNIQUE TO THE PREVIOUS LISTER AND SOFTWARE
DOCUMENT_NO	FROM THE ASSESSMENT DATABASE DISPLAYING THE MOST RECENT DEED REFERENCE

OLD_COMP_NO	LEGACY FIELD THAT WAS USED TO INDICATE THE PARENT TRACT WHEN A SPLIT OCCURRED
CURRENT_TAXES_BEFORE_LOTTERY_CREDIT	THE TAXES BILLED FOR THE MOST RECENT TAX YEAR IN DOLLARS
PREVIOUS_TAXES_BEFORE_LOTTERY_CREDIT	THE TAXES BILLED FOR THE PRIOR YEAR AS A COMPARISON IN DOLLARS
LOTTERY	AN INDICATOR FIELD THAT A LOTTERY CREDIT IS AVAILABLE IN THE ASSESSMENT DBASE
LOTTERY_AMT	THE CURRENT LOTTERY AMOUNT CREDITED TO THAT PARCEL IN DOLLARS
COUNT	LEGACY FIELD. PURPOSE IS UNKNOWN
TOT_LAND	CURRENT ASSESSED VALUE ON THE UNIMPROVED PORTION OF THE PARCEL (LAND)
TOT_IMPROVE	CURRENT ASSESSED VALUE ON THE IMPROVED PORTION OF THE PARCEL (BUILDINGS ETC.)
TOT_VALUE	TOTAL CURRENT ASSESSED VALUE ON THE PARCEL (UNIMPROVED + IMPROVED)
Shape_Leng	STANDARD ESRI FIELD INDICATING THE PERIMETER (IN FEET) AROUND THE POLYGON
Shape_Area	STANDARD ESRI FIELD INDICATING THE AREA (IN SQUARE FEET) OF THE POLYGON

## Assessment/Tax Roll Data

### Layer Status

- Dunn County has expended a large amount of time and money developing its assessment and tax system into a land information management system that provides the source information for the County's Geographic Information System (GIS). The system is the largest and most up-to-date source of land records information in the County. Dunn County participated with Eau Claire County in its RFP process for replacement of the mainframe system with a modern client/server and relational database based system. Xerox/ACS, Inc. was selected as the vendor, and contingency funds were requested and approved in 2006 to purchase the software. Funds were budgeted for 2007 for implementation services and training. IT, Assessment, Treasurer, and Eau Claire County staff participated in both introductory and advanced training on the configuration, administration, customization, and maintenance of the system. After three years of development the Assessment Office and Billing and Collection portion of the Xerox/ACS system went into production in Eau Claire County in 2010. Dunn County has now fully implemented the Xerox/ACS software suite as well. Eau Claire County is developing the Land Development Office portion of the system and Dunn County will review that product as it moves forward. Current Dunn County project plans have the Land Development Office (LDO) implementation scheduled for 2016.

### Custodian

- The Land Information Office responsibilities include maintaining the county's assessment and tax rolls for the townships, villages, and the city of Menomonie. The assessment database contains property and owner descriptions, land types and acreage, land and improvement values, zoning information, school district information, and other land related information. This information is merged with the GIS parcel polygon layer at regular intervals for public distribution.

### Maintenance

- Dunn County employs a dedicated full time position of "Real Property Lister" within the Land Information Office of the I.T. division. (See organization chart

above.) The duties and responsibilities delegated to this position can be viewed in **Appendix “E”**.

- It is the responsibility of this real property lister to update and maintain the tax assessment database as described within the job functions as listed in **Appendix “E”**.
- Some of these delegated responsibilities are being performed by the land information officer (previously GIS specialist) including, but not limited to, parcel splits, and new PIN assignments.

#### Standards

- [s. 73.03\(2a\), Wis. Stats.](#) Department of Revenue (DOR) – Powers and duties defined.  
[Department of Revenue Property Assessment Manual – Chapter 5](#) and DOR format standard requested by DOR for assessment/tax roll data
- [s. 59.72\(2\)\(a\), Wis. Stats.](#) Presence of all nine “Act 20” attributes (**currently “estimated fair market value” is not calculated within the Xerox/ACS tax database.**)
- [s. 59.72\(2\)\(a\), Wis. Stats.](#) Crosswalk of attributes

Act 20 Attributes Required by s. 59.72(2)(a)	Field Name(s) in County Land Info System	Notes on Data or Exceptions to DOR Standard
Assessed value of land	TOT_LAND	n/a
Assessed value of improvements	TOT_IMPROVE	n/a
Total assessed value	TOT_VALUE	n/a
Class of property, as specified in s. 70.32 (2)(a)	landclass1 lcacres1 lclandvalue1 lcompvalue1 (4 fields for each class)	(not on parcel layer)
Estimated fair market value	Not available yet	Pending for 2016
Total property tax	CURRENT_TAXES_BEF ORE_LOTTERY_CREDI T	
Any zoning information maintained by the county	ZONING1	Zoning information is not required in DOR schema
Any property address information maintained by the county	PAR_ADDRESS	n/a
Any acreage information maintained by the county	LEGAL_ACRES	n/a

#### Non-Assessment/Tax Information Tied to Parcels

e.g., permits, easements, non-metallic mining, brownfields, restrictive covenants

#### Layer Status

- There are currently no “non-assessment” types of data attached to the Dunn County parcel polygon feature class. This may change in 2016 once the land development office (LDO) section of the Xerox/ACS land records database is implemented and goes live. This implementation will allow zoning, surveying

and other associated departments, to attach documents, inspection reports, survey reports, review documents, and the like, to the parent parcel using the unique PIN.

**Custodian**

- The project and planning section of I.T. is developing a business process/strategy for the LDO portion of the land records database.

**Maintenance**

- The project and planning section of I.T. is developing a business process/strategy for the LDO portion of the land records database.

**Standards**

- The project and planning section of I.T. is developing a business process/strategy for the LDO portion of the land records database.

**ROD Real Estate Document Indexing and Imaging**

**Status**

• **Grantor/Grantee Index.**

Images are available by Volume/Page or Document # starting in August 1935. All Certified Survey Maps and Plats are scanned into Laredo. You can search by Grantor/Grantee beginning in 1982. We are continuing to back index by grantor/grantee so the back index date is always changing. A tract search by Legal Description is available beginning January 1, 2000.

Fees collected and distributed:

Document recording fee: \$30.00 flat fee

Breakdown of fee is as follows:

\$8.00 - Land Records County (100-20-46132) reported to revenue account

\$7.00 - Land Records State (808-00-24220) (WLIP program)

\$15.00 - Recording Fund (General Fund) ROD revenue account

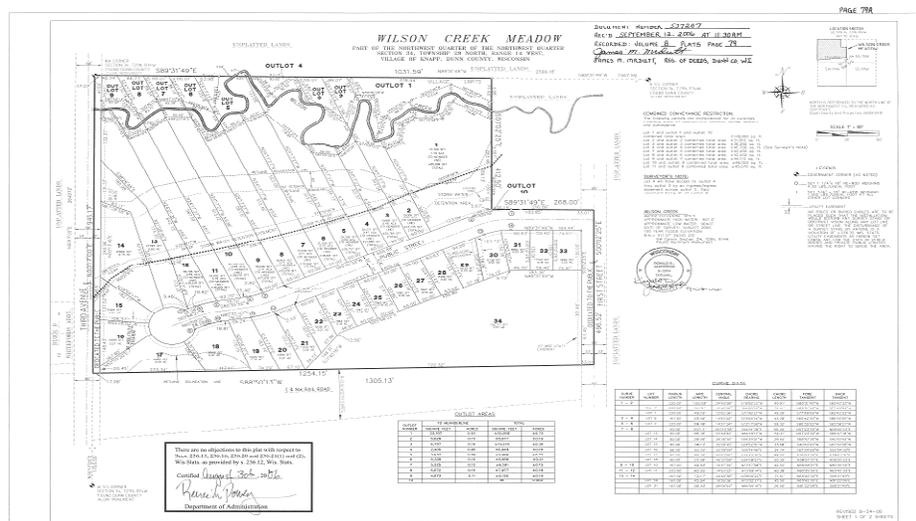
• **Tract Index.**

The tract index is PLSS based.

- **Imaging.** In 1988, Dunn County implemented a document management system for the Register of Deeds Office on the county's mainframe system. The software provided for recording of key document information including Grantor/Grantee but did not provide tract indexing or document imaging.

- In 2000, Dunn County implemented DocuTrack and DocuFee document management system which provided document information, tract indexing, and document imaging.

- In 2003, Dunn County upgraded the DocuTrack



and DocuFee system to the idocument document management system which included moving all document data onto a relational database management system and moving document image storage from optical platters to a Storage Area Network (SAN) server. In addition, all CSM's for the county were scanned and loaded into the database and imaging systems. The idocument system also provides web portal based subscription services for business and a transaction credit card based service for the public and business for access to recorded documents.

- In 2006, The IT Division imported scanned images of subdivision plats into the iDoc document recording system and then scanned new plats recorded in the ROD office and imported them into the iDoc system. Conversion of the ROD Office's microfiche copies of recorded documents from 1988 – 2000 (260,000 pages) to image files was contracted out and then IT staff imported the files into the office's iDoc document recording system. With the completion of these projects the ROD Office will have recorded documents from 1998 to present, all certified survey maps, and all subdivision plats in the iDoc document recording system.
- In, 2008 the Dunn County cemetery layer was created from ROD records and published to the GIS Website. The remaining legacy documents predating 1988 and the original tract index books were contracted out to be scanned and IT staff imported the scanned documents into the iDoc system.

#### Custodian

- County Register of Deeds: The Register of Deeds office responsibilities include receiving, recording, and storing of all legal documents relating to real estate, vital records (birth, death, marriage, and military discharge documents) and Uniform Commercial Code documents.

#### Maintenance

- The Dunn County Register of Deeds Office is staffed with a full time, elected ROD as well as 3, part time, deputies.
- Standards
- [s. 59.43, Wis. Stats.](#) Register of deeds; duties, fees, deputies.
- [ch. 706, Wis. Stats.](#) Conveyances of real property; Recording; Titles.

### **LiDAR and Other Elevation Data**

#### LiDAR

##### Layer Status

- LiDAR, which stands for Light Detection and Ranging, is the process of scanning the earth with lasers to obtain accurate elevations and is similar to sonar where time of travel is used to measure distance. LiDAR is generally accurate to within a foot (8 inches) and supports development of 2-foot contours that meet national map accuracy standards and FEMA requirements. In 2007, Dunn County contracted for and received delivery of 6" color orthophotography and LiDAR for the county. The project utilized 30 high accuracy reference network (HARN) ground control points for both horizontal and vertical control. Ground truthing verified that the accuracy satisfies FEMA standards. The orthophoto/LiDAR is projected in Dunn County Coordinates. A 3D terrain

dataset was also created for spatial analysis. This LiDAR dataset was used to create a 10 foot and 2 foot contour layer, County wide. These layers are served out to the public on the County GIS website, as well as being provide to our internal users. The LiDAR data continues to be a workhorse for many fundamental County GIS tasks. The LiDAR data was the basis for a digital FEMA floodplain study and boundary revision for the entire County. These results were made available in year 2011 and are now published on our GIS website as well as distributed, in house, to the departments that utilize them. See **Appendix "F"** for an accuracy assessment report of the 2007 LiDAR project.

Custodian(s)

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.
- The Planning & Zoning Division is responsible for the enforcement of the Dunn County Comprehensive Zoning Ordinance relating to zoning, sanitation, shore land, and floodplain activities.

Maintenance

- The 2007 LiDAR raw dataset is a static series (tiles at 5000' x 5000') of x,y,z and i ascii tab files archived and stored as both bare earth, and first return sets of data. These raw data files are seldom used, but are sometimes provided, and/or sold, to educational and other geospatial agencies that have the means to produce tangible products from these raw files. The data resides on a county network disk based server and are backed up twice a day.

Standards

- See **Appendix "F"** for an accuracy assessment report of the 2007 LiDAR project.
- In 2011 Dunn County also received a series of digital data (CD-ROM format) that contained the updated Federal Emergency Management Agency (FEMA) flood plain study data results and related documents and datasets. Dunn County has published the most used 100 year floodplain shapefile, as well as the corresponding cross section information, to the county GIS website. This, and other, information is also available internal to the departments that use them. The delivered digital FIRM panels are in the hands of the Dunn County Zoning Office, and hard copies were made, of each panel, for better public viewing and collaboration. The following is an excerpt from the "readme" file that was supplied on the CD-ROM that was delivered, from FEMA, to Dunn County. Again, the actual CD-ROM disks are housed at the Dunn County Planning and Zoning Offices. Digital backups of these CD's were made, and reside on a disk based network server that is backed up 2 times a day.

Data included on this CD-ROM represents Final Flood Insurance Rate Map (FIRM)

data that has been published as effective FIRM or DFIRM information. The data are the official and legal representation of the effective flood zones.

Directory Structure:

\*\*\*\*\*

There are 2 versions of FEMA's DFIRM database: the Standard and the Enhanced.

The Standard database information is stored under the /DFIRM\_DB directory and if there are any Enhanced database tables, they would be stored in the /Enhanced\_DB

directory. The three database file formats are found in the following sub-directories:

Files in Shapefile format (.shp/.shx/.dbf) are located at /ArcShape

Files in ESRI Interchange format (.e00) are located at /ArcExport

Files in MapInfo Interchange format (.mif/.mid) are located at /MapInfo.

The /Document directory stores the metadata and readme files.

The /Ortho\_photos directory stores any applicable raster data that is shown on the map along with their world files.

The /RFIRM directory stores raster images of the printed panels along with their world files.

The /FIS directory holds a copy of the FIS in PDF format, when applicable.

For users without access to appropriate GIS software, a data viewer from ESRI, ArcExplorer 2.0, can be obtained for free at the following website. This software is freely distributable and technical support is solely available from ESRI at [www.esri.com](http://www.esri.com).

## LiDAR Derivatives

e.g., terrain, contours, digital elevation models, etc.

### Layer Status

- An ESRI LiDAR derived file geodatabase terrain dataset was provided by the Department of Natural Resources (DNR) as a bi-product of the collaborative effort between them and FEMA. This useful digital elevation modeling tool has been provided to those departments that have the software, and need, to use it.

### Custodian

- Dunn County Land Information Office

### Maintenance

- No maintenance required (backed up on a regular basis)

### Standards

- See **Appendix "F"**

## LiDAR Derivatives

### Layer Status

- 2 foot and 10 foot contour layers both in shapefile format and autocad (.dwg) format. Lines are 3D polylines with attributes.

### Custodian

- Dunn County Land Information Office

### Maintenance

- No maintenance required (backed up on a regular basis)

### Standards

- See **Appendix "F"**

## Orthoimagery

### Orthoimagery

#### Layer Status

- The most often used aerial photo is a **Wisconsin DNR photo from the fall of 2012**. Metadata is provided below:

DIGITAL ORTHOPHOTO (DOP) COVERAGE FOR DUNN COUNTY

-----

FORMAT: MR SID

PRODUCER OF ORIGINAL DOP: SURDEX CORPORATION (flight/orthorectification)

CUSTODIAN OF ORIGINAL DOP: SURDEX CORPORATION

INTENDED DISPLAY SCALE: unknown

GROUND RESOLUTION: 1.5-foot pixels  
PROJECTION: Wisconsin Transverse Mercator (WTM)  
HORIZONTAL DATUM: NAD83, 1991 Adjustment (HPGN, or HARN)  
ACCURACY: MEETS OR EXCEEDS NMAS for 1"=500'  
COMPRESSION FACTOR: 20:1  
FILE SIZE: 2.1 GB  
SOURCE IMAGERY: Fall 2012  
LEAF: Peak Fall  
SPECTRA: CIR  
SCALE OF SOURCE PHOTOGRAPHY: 1:15,000  
RECTIFICATION SOURCE: 10m National Elevation Dataset  
USAGE RESTRICTIONS: No usage restrictions.

- We also use the **2013 National Agriculture Imagery Program (NAIP) 1 meter photo** as our most current picture. (Key metadata provided below)

Citation\_Information:

Originator: USDA/FSA - Aerial Photography Field Office

Title: USDA-FSA-APFO NAIP MrSID Mosaic

Calendar\_Date: 2013

Spatial\_Domain:

Bounding\_Coordinates:

West\_Bounding\_Coordinate: -92.15713

East\_Bounding\_Coordinate: -91.64975

North\_Bounding\_Coordinate: 45.20949

South\_Bounding\_Coordinate: 44.6835

The U.S. Department of Agriculture, Service Center Agencies should be acknowledged as the data source in products derived from these data.

Contact\_Organization: Aerial Photography Field Office

Contact\_Address:

Address: 2222 W. 2300 South

City: Salt Lake City

State\_or\_Province: Utah

Postal\_Code: 84119

Data\_Quality\_Information:

Lineage:

Publication\_Date: 2013

Title: USDA-APFO National Agricultural Inventory Project

Source\_Scale\_Denominator: 12,000

Process\_Step:

Process\_Date: 201310

Spatial\_Reference\_Information:

Horizontal\_Coordinate\_System\_Definition:

Planar:

Grid\_Coordinate\_System:

Grid\_Coordinate\_System\_Name: Universal Transverse Mercator

Universal\_Transverse\_Mercator:

UTM\_Zone\_Number: 15

Transverse\_Mercator:

Scale\_Factor\_at\_Central\_Meridian: 0.9996

Longitude\_of\_Central\_Meridian: -93

Latitude\_of\_Projection\_Origin: 0.0

False\_Easting: 500000.0

False\_Northing: 0.0  
Geodetic\_Model:  
Horizontal\_Datum\_Name: North American Datum of 1983 (NAD83)  
Ellipsoid\_Name: GRS1980  
Semi-major\_Axis: 6378137.0  
Denominator\_of\_Flattening\_Ratio: 298.257222101

Entity\_and\_Attribute\_Information:

Overview\_Description:

Entity\_and\_Attribute\_Overview:

Each pixel contains an 8-bit gray-scale value. For color-infrared and natural color a digital number from 0 to 255 is assigned to each pixel and that number refers to a color look-up table which contains the RGB red, blue and green values, each from 0 to 255, for that digital number. Areas where the rectification process is incomplete due to incomplete data (i.e., lack of elevation data, gaps), are represented with the numeric value of 0.

Format\_Name: MrSID

Metadata\_Reference\_Information:

Metadata\_Date: 12/29/2014

Metadata\_Standard\_Name: SCI Minimum Compliance Metadata

Metadata\_Standard\_Version: SCI Std 003-02

- Specify currency of imagery, the resolution, contractor's standard, and the update cycle: Dunn County is not currently enrolled or under contract with any aerial imagery firm. Budgetary constraints have prohibited any new "in house" imagery flights.
- Specify whether county participated in WROC 2015:  
Dunn County has not participated in the Wisconsin Regional Orthophotography Consortium (WROC)
- Give next year of planned flight that occurs after 2015:  
At the time of this writing (10/27/2015) Dunn County has no immediate plans to procure a current, high resolution aerial photo product. This is not for a lack of need, but based on budgetary constraints. This is fiscal driven project and monetary situations may change.

#### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

#### Maintenance

- No maintenance required (backed up on a regular basis)

#### Standards

- No current standards for our ortho-imagery products

### Historic Orthoimagery

#### Layer Status

- Dunn County keeps the following aerial photos on a backup server for unique and special instances. (Those marked with an asterisk (\*) are available to view on the GIS public web site.
- 2010 WROC 18" Color Photo\*
- 2007 6" Color Early Summer Leaf On Photo\*
- 2004 12" Black and White Spring Leaf Off Photo\*
- 1992 USGS 1 meter Black and White Photo\*

## Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

## Maintenance

- No maintenance required (backed up on a regular basis)

## Standards

- No current standards for our historical ortho-imagery products

## Address Points and Street Centerlines

### Address Point Data

#### Layer Status

- The land information office of Dunn County also administers the rural addressing program for the County. The GIS portion of this address work consists of maintaining a point file feature class associated with the geodatabase used to drive the E911 mapping and dispatch center data. Current containing 16,434 unique address points, this feature set also includes the physical addresses for 7 Villages (Colfax, Knapp, Ridgeland, Wheeler, Boyceville, Downing and Elk Mound) and 1 City (Menomonie.) Currently, there is not a good line of communication between the Villages and the land information office in regards to address maintenance. The current points were derived from the GIS parcel layer, extracted as a centroid of the parcel, and then attributed with the physical address of record. This global centroid creation was done around year 2007, and the point file has been maintained and updated ever since. The City of Menomonie has been more cooperative in providing corrections to the existing database, as well as providing addressing schemas for the new subdivision lots created within the City limits. These site addresses are also entered into the Xerox/ACS tax system, and tied to the appropriate parcel as a physical address. (not necessarily the mailing address, which is a separate table.) Partial metadata is provided.

### Metadata description

#### Abstract

This is a point feature class representing the situs addresses for Dunn County. This layer is maintained and updated as part of the rural addressing maintenance program, within the Department of Administration, I.T. Division of Dunn County.

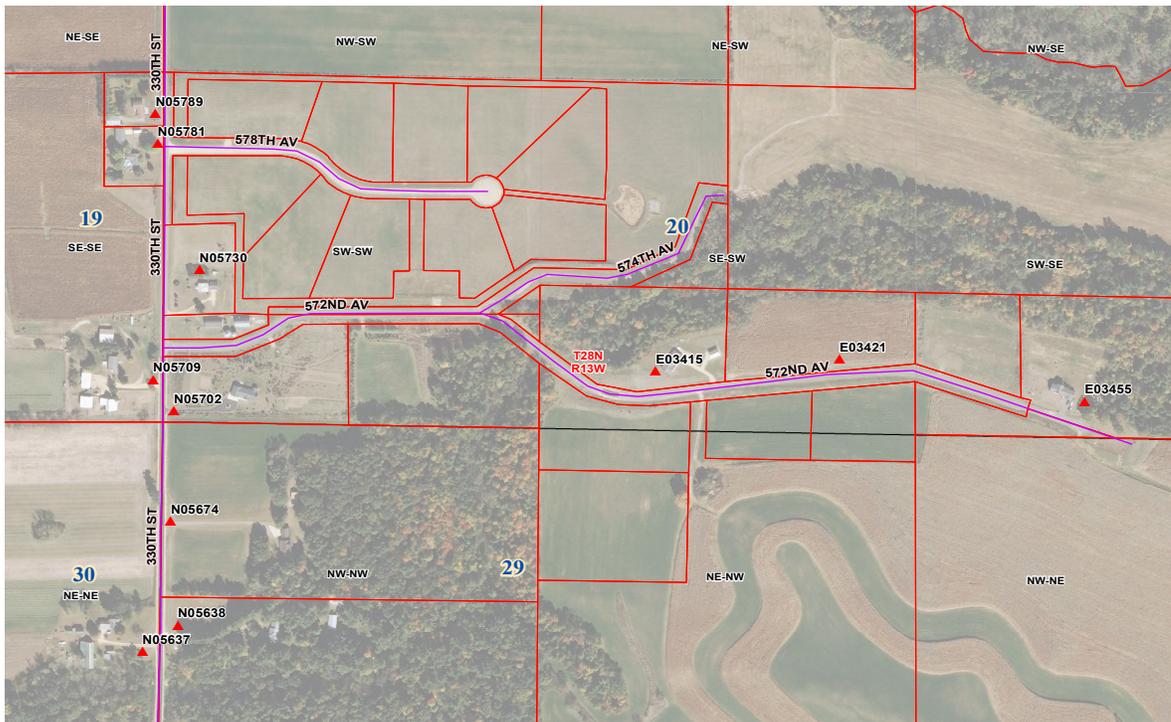
The layer is exported (as deemed necessary) from the main GIS and re-named accordingly. Note that the I.T. Division does not formally maintain or administer addresses within Villages or Cities.

#### Purpose

The purpose is to provide a point for each situs address in Dunn County for a variety of uses.

#### Supplementary Information

The village and city addresses were extracted from the parcel address field of the tax assessment database. A point was created at the centroid of each parcel. These points may or may not have been adjusted on the village and city parcels. Also note that the rural addresses were derived the same way, but have since been moved and adjusted to best reflect the driveway location, or at least the location of the rural address sign. The adjustment of these address points were done using the 2008 NAIP, and more current, aerial photos. In some of the more congested and populated areas, a GPS camera was used, and field visits were taken to precisely identify each sign location. This is still a work in progress.



### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. As of January 1<sup>st</sup>, 2010, the division also maintains rural addressing for the county and issues new addresses for rural properties.

### Maintenance

- Inherited from the Dunn County Zoning Office in January of 2010, the Dunn County rural address program has grown and evolved along with the new technology that becomes available. Currently a rural address applicant has a variety of ways to submit and apply for a rural address (also referred to as a fire number.) By visiting the appropriated website on the main Dunn County web presence, [http://www.co.dunn.wi.us/index.asp?SEC=02DD6503-CDA8-4CBA-82BA-0943CD7BFF80&Type=B\\_BASIC](http://www.co.dunn.wi.us/index.asp?SEC=02DD6503-CDA8-4CBA-82BA-0943CD7BFF80&Type=B_BASIC) the applicant can read through the informational content and become informed as to the history, process and importance of the rural addressing program. The

availability to complete an on-line application allows the applicant to complete the process from a remote computer and supply the appropriate payment with a convenient credit card process. The applicant can also download the application form, use postal mail and include a personal check or cash payment as they prefer. We also encourage the applicant to visit our office for a more personal experience. Once the application is received, approved and the number is assigned, the new information can now be updated to the Xerox/ACS tax system as well as the aforementioned address feature dataset with the E911 GIS mapping. The new address signs are ordered, and within about a month the delivered signs will be available for pick up and self installation by the applicant and/or their representative. An 8' steel post and the mounting hardware are included in the \$75.00 fee for a new sign. Replacement signs can also be ordered, the same way, for a \$50.00 fee.

## Standards

- Please review the Dunn County rural addressing website for information about the history, process and importance of the rural addressing program in our County.

## Street Centerlines

### Layer Status

- The Dunn County centerline layer is also a product of the E911 mapping project geodatabase. Partial metadata is provided below:

#### [Details for Dunn\\_Trans](#)

Type of object: Feature Class

Number of records: 5266

#### Overview Description

The centerline layer was first created in the mid 1990's when the County obtained a real time kinematic GPS system. At that time, all the roads were driven, GPS collected, and that data was reduced to a centerline layer. Over the years, that data served as the basis for the County mapping system. There were some inconsistencies with this data including omissions, bad GPS data, mislabeling and the like. This layer, in one form or another, was shared and edited within various County agencies. In 2004 the GIS division was created within the MIS (IT) Department. It was then that the GIS data was to become standardized and distributed via an enterprise GIS schema so the data would remain "clean". The E911 CAD project catalyzed the clean up of this dataset, resulting in the data we use today.

FIELD NAME	DESCRIPTION
FID	STANDARD ESRI INDEXING FIELD NOT USED FOR OUR PURPOSES
Shape	STANDARD ESRI GEOMETRY FIELD INDICATING A POLYLINE FOR EACH SEGMENT
OBJECTID	STANDARD ESRI OBJECT ID INDEXING FIELD NOT USED FOR OUR PURPOSES
CAD_ERR	LEGACY FIELD USED ON ORIGINAL BUILD TO INDICATE ERRORS (N OR Y)
COMMUNITY	THE COMMUNITY THE SEGMENT RESIDES IN (NAME OF TOWN, CITY OR VILLAGE INDICATED)
PREDIR	A PRE DIRECTIONAL INDICATOR SUCH AS N S E OR W
PRETYPE	THIS FIELD IS NOT USED IN THIS DATASET
STREETNAME	CORE NAME OF STREET (e.g. FIRST, MAPLE, 525 <sup>TH</sup> , CTY TK W)
STREETTYPE	TYPE OF STREET (AV, ST, LA, CIR etc.)
POSTDIR	POST DIRECTIONAL INDICATOR SUCH AS NE, SE, SW, NW, etc.

LABEL	A CONCATENATION OF THE PREVIOUS FIELDS. USED IN LABELLING
RDCODE	A COUNTY CODE INDICATING THE CLASS OF HIGHWAY <b>See Appendix "G"</b>
FIREPREFIX	RURAL ADDRESS INDICATOR OF E OR N (E=AVENUE N-STREET)
FROMLEFT	BEGINNING OF THE ADDRESS RANGE ON LEFT SIDE OF SEGMENT
TOLEFT	END OF THE ADDRESS RANGE ON LEFT SIDE OF SEGMENT
FROMRIGHT	BEGINNING OF THE ADDRESS RANGE ON RIGHT SIDE OF SEGMENT
TORIGHT	END OF THE ADDRESS RANGE ON RIGHT SIDE OF SEGMENT
FROM_NUM	LOWEST FROM RANGE NUMBER FOR SIMPLIFIED USE IN E911 DISPATCH
TO_NUM	HIGHEST TO RANGE NUMBER FOR SIMPLIFIED USE IN E911 DISPATCH
ESNL	EMERGENCY SERVICE NUMBER ON LEFT SIDE OF SEGMENT
ESNR	EMERGENCY SERVICE NUMBER ON RIGHT SIDE OF SEGMENT
Routing	YES OR NO USED IN NETWORK ROUTING
Oneway	REQUIRED FIELD FOR USE IN NETWORK ROUTING
O_E_B	ODD EVEN OR BOTH USED IN DISPATCH AND ROUTING
CROSS_FROM	FROM CROSS STREET
CROSS_TO	TO CROSS STREET
DISP_ZONE	DISPATCH ZONE (USED IN E911 INDICATING WHICH MUNICIPALITY TO DISPATCH)
ESN	EMERGENCY SERVICE DISTRICT ZONE THAT ROAD SEGMENT IS CONTAINED WITHIN
IRA	INDIVIDUAL RESPONSE AREA. A CODE WHICH INDICATES DIFFERENT DISPATCH SCENARIOS
G_C	LEGACY FIELD THAT WAS CREATED WHEN DATA WAS BUILT. USE FOR IMPORT INTO CAD
CAD	LEGACY FIELD THAT WAS CREATED WHEN DATA WAS BUILT. USE FOR IMPORT INTO CAD
EDIT_DATE	CURRENT DATE FIELD WHEN ANY EDITS ARE MADE
Shape_Length	STANDARD ESRI FIELD INDICATING THE PERIMETER (IN FEET) OF THE SEGMENT

## Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. As of January 1<sup>st</sup>, 2010, the division also maintains rural addressing for the county and issues new addresses for rural properties.

## Maintenance

- This dataset is in continual maintenance mode. Although the actual edits are made by the land information officer, the indication that edits need to be made come from a variety of sources; e.g. E911 dispatch, Zoning, various municipalities, and others. Commonly E911 will submit a work order to extend a to/from range on a unique road segment. If an E911 call is taken and the address provided, if our road segment is not attributed with that range correctly, the call will not map. The GIS tech or LIO will edit the attributed road segment and update that record in the dispatch system. Another common scenario is when a new plat or subdivision is recorded. These newly dedicated roads need to be built in to the system. Normally the plat is geo referenced (rubber sheeted) on to the GIS and the road segments are digitized from that document. All attributes must be completed and updated in the E911 dispatch system. Any other modifications or relocation orders for public roads may involve a remapping of a certain segment of that road. This polyline feature class must be topologically correct with absolutely no gaps, overlaps or breaks. It is imperative that the road

segment ends must snap to the adjacent road segment ends, or the system will not map and/or route correctly. We have learned over the past 10 years, that the E911 digital mapping/dispatch system is unforgiving of mistakes on this feature class. All attributes must be correctly entered and checked to ensure proper dispatch scenarios when an incident takes place. The layer is also used in a variety of other mapping applications within, and outside of, the County.

#### Standards

- 

### Other Types of Address Information

e.g., address ranges

#### Layer Status

- The address ranges are built into the transportation centerline road data as described above.

#### Custodian

- see above as pertaining to street centerlines

#### Maintenance

- see above as pertaining to street centerlines

#### Standards

- see above as pertaining to street centerlines

### Rights of Way

#### Layer Status

- We have much work to do on the Dunn County right of way layer. When we contracted out our parcel mapping in the early 2000's, (see the "Parcel Mapping" section above) the consulting mappers, did not do an adequate job of delineating the right of way boundaries. Road widths were estimated, fee title rights of way were ignored, plats and surveyed private roads were overlooked, so in the end we have a very inconsistent and inaccurate representation of the road rights of way in our County. As time passed, and the parcel mapping moved "in house", if there was an evident error or omission noticed by the GIS tech or LIO, the area was re-mapped and the proper procedures were followed to reconstruct the rights of way boundaries in that certain area. Of course that leads to an unreliable right of way layer that is in need of a serious overhaul.

#### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. It has been a topic of discussion, in recent years, to budget for, and fill a dedicated GIS tech/intern position to address these gaps, errors and inconsistencies, within our parcel layer dataset. This position has been successfully budgeted for, for fiscal year 2016, and with this additional staff, we are hopeful to begin to move forward with correcting some of our more glaring inconsistencies within the County GIS data layers.

#### Maintenance

- GIS/LIO and possible GIS intern/tech.

#### Standards

- Normal parcel mapping standards using whatever documents, maps, and plats that are available to correctly represent the rights of way for federal, state, county, town and city/village roads.

## Trails

e.g., recreational trails

### Layer Status

- The DNR trails in Dunn County (Red Cedar, Chippewa River, Stokke and Hoffman Hills Trails) are mapped and attributed (Mile marker posts) as part of the Dunn County transportation layer described above. As a recent update to the E911 mapping system, a county ATV layer was added as an overlay to the transportation layer. This ATV layer only includes those portions of public roads as designated for use by ATV's. Once departed from the public road, there is no formal mapping for the off-road trail system as of this writing.

### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

### Maintenance

- GIS/LIO and possible GIS intern/tech. These trails do not change significantly over the course of time, so there is not a lot of maintenance needed here. If any new trails are added they will be updated on the transportation layer as needed. The data resides on a county network disk based server and are backed up twice a day.

### Standards

- Implementing digitization techniques using current aerial photography.

## Land Use

### Current Land Use

#### Layer Status

- The Dunn County Environmental Services Department is currently working with participating Townships and assisting with the development of land use plans as requested. In October of 2014, Dunn County adopted a resolution effectively rewriting the previously existing zoning ordinance from 1993. During this transition period, the Dunn County Environmental Services Office staff was very engaged in assisting participating Townships with analysis, understanding and planning for this major overhaul in the zoning ordinance. This involved many nights spent at Town planning commission and board meetings going over maps, development scenarios and trends, hearing public comments and the like. The challenge going forward is keeping the "new" maps and underlying data, organized, current and readily available for each unique municipality to use, as needed. The Land Information Office can help with that process.

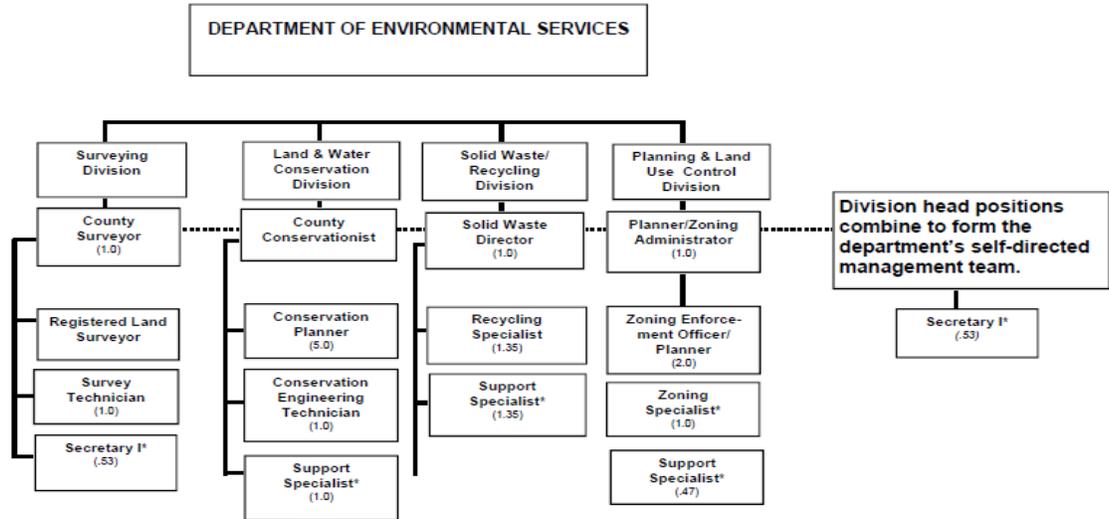
#### Custodian

- With assistance from the Land Information Office, the Dunn County Environmental Services Office has been engaged, and proactive, in creating, and maintaining, a GIS for their own, internal use. There needs to be, and expected to be, collaboration between the Land Information Office staff, and the Environmental Services Office staff when dealing with these interrelated feature classes and datasets.
- As an important note to be made, the Dunn County Planning, Zoning, Surveyor, Land Conservation, and Solid Waste (collectively the Environmental Services Office) has been in a totally different building, located about 2 miles away, from the main government center which houses the Land Information Office. As of

November 17, 2015 those offices and staff are relocating back to the newly remodeled aforementioned government center. This move is anticipated to greatly improve communication and collaboration between our departments.

Maintenance

- The zoning/planning offices, as well as the land conservation office, both have competent and experienced GIS users on staff. These staff create, maintain and distribute geospatial data and maps, as determined by their individual disciplines, and their user’s unique needs. This may include farmland preservation mapping, zoning/planning and density analysis, clean water, and water resources management just to name a few. It is imperative that these disjunct offices of land information, and environmental services become more of a cooperative unit within the land records framework of Dunn County.



Standards

- The Land Information Office and Environmental Services Department will need to coordinate work and standards on the mapping being done. This also includes a maintenance and backup plan to document the historical nature of these datasets.

Future Land Use

Layer Status

- As mentioned above, participating Townships generally coordinate with the environmental services office for assistance with future use planning and mapping. Currently 16 of the 22 political townships in Dunn County are participants in the county zoning program. The other 6 are considered “un-zoned” townships and may, or may not, have their own planning and subdivision ordinances in place. The environmental services office, including the branch of Land Conservation, works, on a case by case basis, with each of these participating townships as needed. Often, a key driving component for these land use planning activities, is a current and up to date parcel layer. The land information office works with, and provides support to, the environmental services office as requested. Efforts are underway to coordinate and integrate the current ACS tax data system land development office (LDO) module into everyday use for these types of planning activities. See the “Non-Assessment/Tax Information Tied to Parcels section” above for a better explanation of the business plan to implement LDO in year 2016.

Custodian(s)

The Land Conservation office responsibilities include designing and installing soil erosion control and water quality practices for agricultural, commercial, and recreational development, and developing land and resource management plans. The office maintains the agricultural planning and management records, farmland preservation participation, and the soil survey in cooperation with NRCS.

The Planning/Zoning office responsibilities include maintaining and enforcing the county's comprehensive zoning ordinance for 16 of the 22 townships in the county and sanitary and private sewage system ordinances. This section is also entrusted to assist the constituents of Dunn County with directional planning and development advice as needed.

(See Surveying custodian duties in the PLSS section of this document.)

#### Maintenance

- Cooperative efforts will be needed to create better lines of communication as to how the data is being built, stored, and distributed. Duplication of work needs to be reduced and assignment of assumed duties needs to be clarified.

#### Standards

- [s. 66.1001, Wis. Stats.](#) Comprehensive planning. Future land use maps are typically created through a community's comprehensive planning process. Future land use mapping for a county may be a patchwork of maps from comprehensive plans adopted by municipalities and the county.

## Zoning

### County General Zoning

#### Layer Status

- See **Appendix "D"** for current (as of 10/2014) zoning codes. The zoning codes are displayed in a designated field on the Dunn County parcel layer. This code is maintained and derived from the ACS/Xerox tax assessment database. The designated zoning code is assigned to each parcel, assuming the municipality participates under the Dunn County zoning jurisdiction. This zoning code is also maintained throughout the transfer and splitting process within the real property lister's day to day work. When a parcel is split, the previous zoning code is assigned to the children parcels, unless a re-zoning has occurred. The Dunn County zoning office also has editing rights, within the ACS/Xerox tax database, to make zoning code corrections, edits and changes when they occur. Once the current data is joined to the parcel polygon dataset, any number of GIS mapping methods can be used to symbolize and highlight the assigned zoning on each parcel. Those parcels within non-participating municipalities will be hollow, with no zoning designation displayed. Currently the Dunn County zoning layer is being quality checked for accuracy by the zoning office staff. In the spring of 2015, approximately 18,000 edits were made to change the old zoning codes to the new. This change was done within the land information office using the ACS/Xerox tax database software. The old zoning map is the only mapping layer currently on the GIS website, although the new zoning can be obtained by viewing the tax information/land information associated with any parcel.

#### Custodian

- There are 2 custodians at this time. The land information office and the zoning office. Both of these departments have editing rights to make corrections, changes, edits, and/or updates to the zoning code on any given parcel. It is preferable that the zoning office do the majority of these zoning edits and

changes. Currently the only zoning edits the land information office is making, is when a zoned parcel is split into 2 or more children parcels. The parent zoning is carried over to the children parcels.

#### Maintenance

- Again, it is preferable business practice to have the Dunn County zoning office take complete ownership of this field. As mentioned, the property lister or GIS tech/LIO will carry previous zoning codes over when splits occur.

#### Standards

- Please review the Dunn County comprehensive zoning ordinance available on the main Dunn County web page here:
- [http://www.co.dunn.wi.us/index.asp?SEC=D8CD0D96-BFAC-4192-9BC4-3EAD70B1A2A0&Type=B\\_BASIC](http://www.co.dunn.wi.us/index.asp?SEC=D8CD0D96-BFAC-4192-9BC4-3EAD70B1A2A0&Type=B_BASIC)

### County Special Purpose Zoning

e.g., shoreland, farmland preservation, floodplain, and airport protection

#### Layer Status

- The Dunn County Zoning Office, in conjunction with the County Land Conservation Office, is currently in the process of developing a process, using GIS, for administering a County wide farmland preservation program. This process differs from the main Dunn County parcel layer as it treats all contiguous ownership as one parent parcel. So an established farm (say Dairy land Acres, LLC) may own 20, forty acre tax parcels, but the farmland preservation program will consider the entire parcel, containing 800 acres, as one parent tract. We are still in the initial planning stages of how this dataset will be maintained.
- The Dunn County Zoning Office administers the shoreland zoning program. Although the lakeside parcels maintain a current County zoning code (say R1 or R2) the proximity to the navigable water dictates whether the County will enforce the shoreland zoning protection program restrictions. Notes are required on all certified surveys, and plats, that divide these shoreland designated parcels.
- Airport protection layers are available as provided by each individual and controlling municipality. The City of Menomonie regulates the Raymond Score municipal airport, located in east Menomonie. The Village of Boyceville regulates the airport located within their municipal limits. These layers are fairly static, and are not used often at the County level.
- Our LiDAR derived, 2010 floodplain layers are used quite often for a variety of purposes. These layers are available on the Dunn County public GIS website, as well as internally to designated staff.

#### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The aforementioned farmland preservation database will be maintained by the Dunn County Zoning Office, under advisement from the Land Information Office.

#### Maintenance

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The data resides on a county network disk based server and are backed up twice a day.

#### Standards

- FEMA floodplain standards are followed for the 100 year flood program. Other standards for these land use type datasets are being developed as part of the project plan.

## 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

- Dunn County land information office supports several unique and specific layers related to the City of Menomonie, and our 6 incorporated Villages. (Boyceville, Colfax, Knapp, Downing, Ridgeland, and Wheeler.) Although we aren't contracted by any of these municipalities, there are times when various County Departments request proximity type information from our GIS. This may include, but is not limited to, extra-territorial zoning, sanitary districts, City/Village limits (see Administrative Boundaries) airport zoning, and the like.

### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

### Maintenance

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The data resides on a county network disk based server and are backed up twice a day.

### Standards

- There are no standards, in place, for these types of miscellaneous layers.

## **Administrative Boundaries**

### Civil Division Boundaries

e.g., towns, city, villages, etc.

### Layer Status

- The Dunn County land information office maintains a variety of administrative related datasets. Most recently we have been actively participating with the Wisconsin Department of Legislature (legislative technology services bureau) and submitting our municipal and voting ward boundaries for inclusion into the County Boundary Annexation Survey data creation process. This process has guided us to a more accurate and topologically clean polygon dataset for our administrative layers. These layers include; municipal boundaries, voting ward boundaries, and supervisory boundaries. With 29 County Supervisors, this dataset is often changing due to one reason or another. We keep an active copy of this supervisory dataset on the Dunn County public GIS website.

### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

### Maintenance

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The data resides on a county network disk based server and are backed up twice a day.

### Standards

- The WISE/CBAS program through the Wisconsin State Legislature GIS team guides us through the quality control and standards for the data we submit.

## School Districts

### Layer Status

- Our ACS tax database contains a unique state code for each specific school district assigned to each individual parcel. This field is then exported and joined to our GIS parcel layer. We can extract the school code information and create a separate individual layer based on that unique information. We have done this, and keep a copy of this for public viewing on our GIS public website. This is designated as a UTA code in our ACS tax database.
- Specify whether and how school districts are tied to parcels, and which specific school district attribute(s) are linked to parcels

### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

### Maintenance

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The data resides on a county network disk based server and are backed up twice a day.

### Standards

- Use State provided codes

## Election Boundaries

e.g., voting districts, precincts, wards, voting places, etc.

### Layer Status

- Dunn County, with collaboration between the LIO and the County Clerk's Office, is participating in the Wisconsin State Legislature WISE-Decade/CBAS program. Dunn County has submitted our municipal and voting ward boundaries for inclusion into this program. Please proceed to this web based map for specific geographic details.  
<https://wisedecade.legis.wisconsin.gov/viewer.aspx>

### Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

### Maintenance

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The data resides on a county network disk based server and are backed up twice a day.

### Standards

- The submitted data is vetted by the LTSB GIS team. State Legislative and U.S. Census guidelines are followed.

## Utility Districts

e.g., water, sanitary, electric, etc.

### Layer Status

- No dedicated GIS layers for public utilities. Dunn County Land Information Office will coordinate with outside municipalities on a case by case basis. These

projects may be treated as custom mapping jobs and the data is stored and archived accordingly.

Custodian

- Land Information Office

Maintenance

- As needed

Standards

- Dependent on the specific project.

## Public Safety

e.g., fire/police districts, emergency service districts, 911 call center service areas, healthcare facilities

Layer Status

- Several, unique, emergency district and dispatching layers are maintained within the E911 and computer aided dispatch (CAD) systems. These layers include the emergency service layer (ESN), an individual response layer (IRA) and an overall district boundary layer (zip code) that help suggest a predetermined dispatch scenario for any given incident within the County boundary. These layers were created in 2007, when Dunn County made the conversion to digital dispatch and mapping. Although mostly static, there are times when these boundaries are modified. Examples of this would be when annexations occur, or when abutting emergency service boundaries are modified. The layers are built in to the GeoLynx GIS mapping system and are edited and updated as requested by the E911 director.

Custodian

- The Land Information office, in coordination with the E911 Department, responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use.

Maintenance

- As needed and directed by the E911 Director.

Standards

- Internal GIS topological standards are utilized to ensure accurate mapping within the GeoLynx mapping environment.

## Other Layers

### **Hydrography Maintained by County or Value-Added**

e.g., hydrography maintained separately from DNR or value-added, such as adjusted to orthos

Layer Status

- Dunn County maintains a hydrography layer that includes our lakes, rivers and navigable streams. This layer is static, and is not updated frequently. The stream layer was revised using our 6" leaf off, black and white aerial photo and point by point digitization.

Custodian

- The Land Information office responsibilities include continual editing and updating of the County's digital base layers, associated databases, and metadata for all of the datasets that are offered for public and internal use. The data resides on a county network disk based server and are backed up twice a day.

Maintenance

- As needed

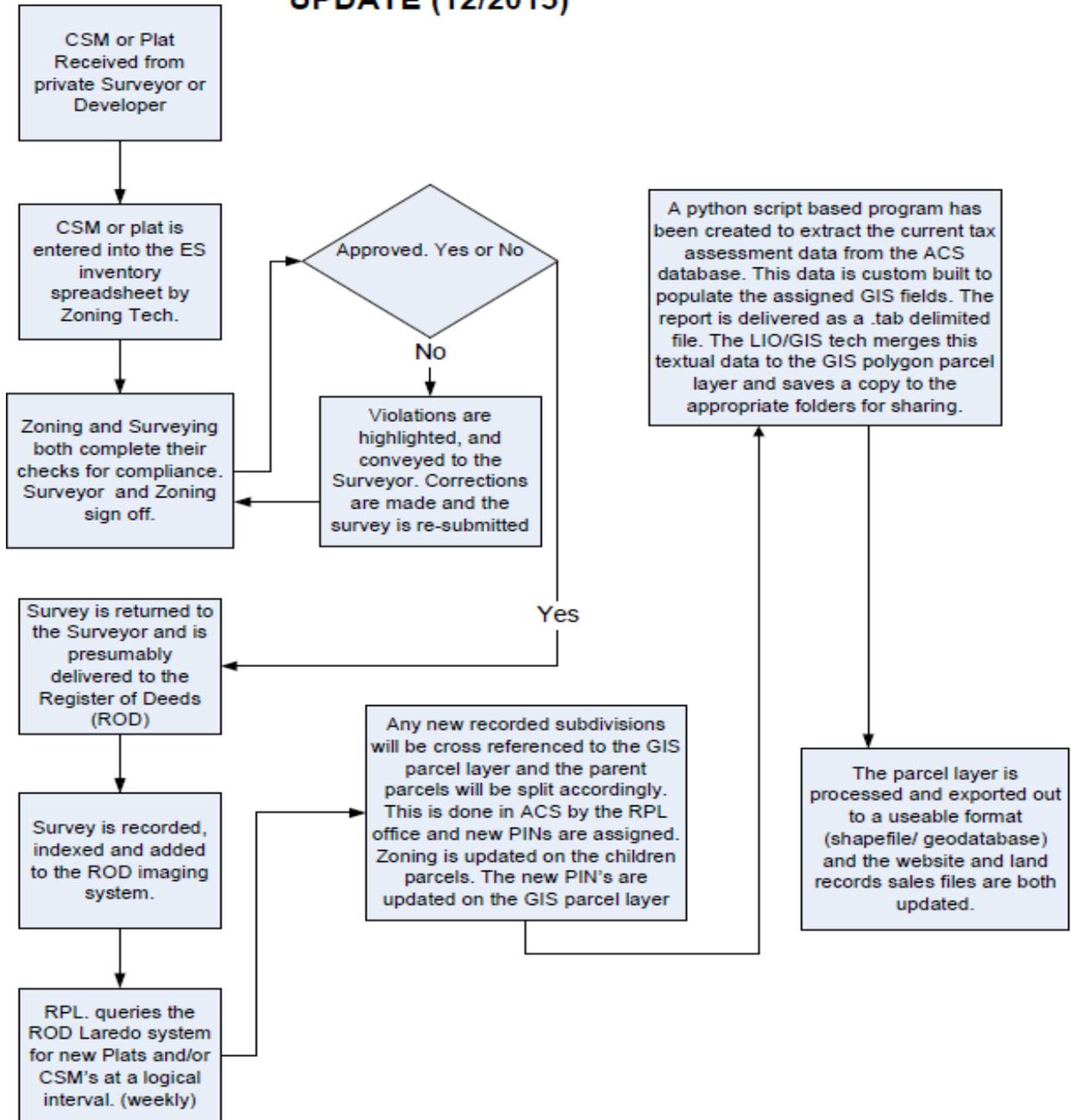
Standards

- None

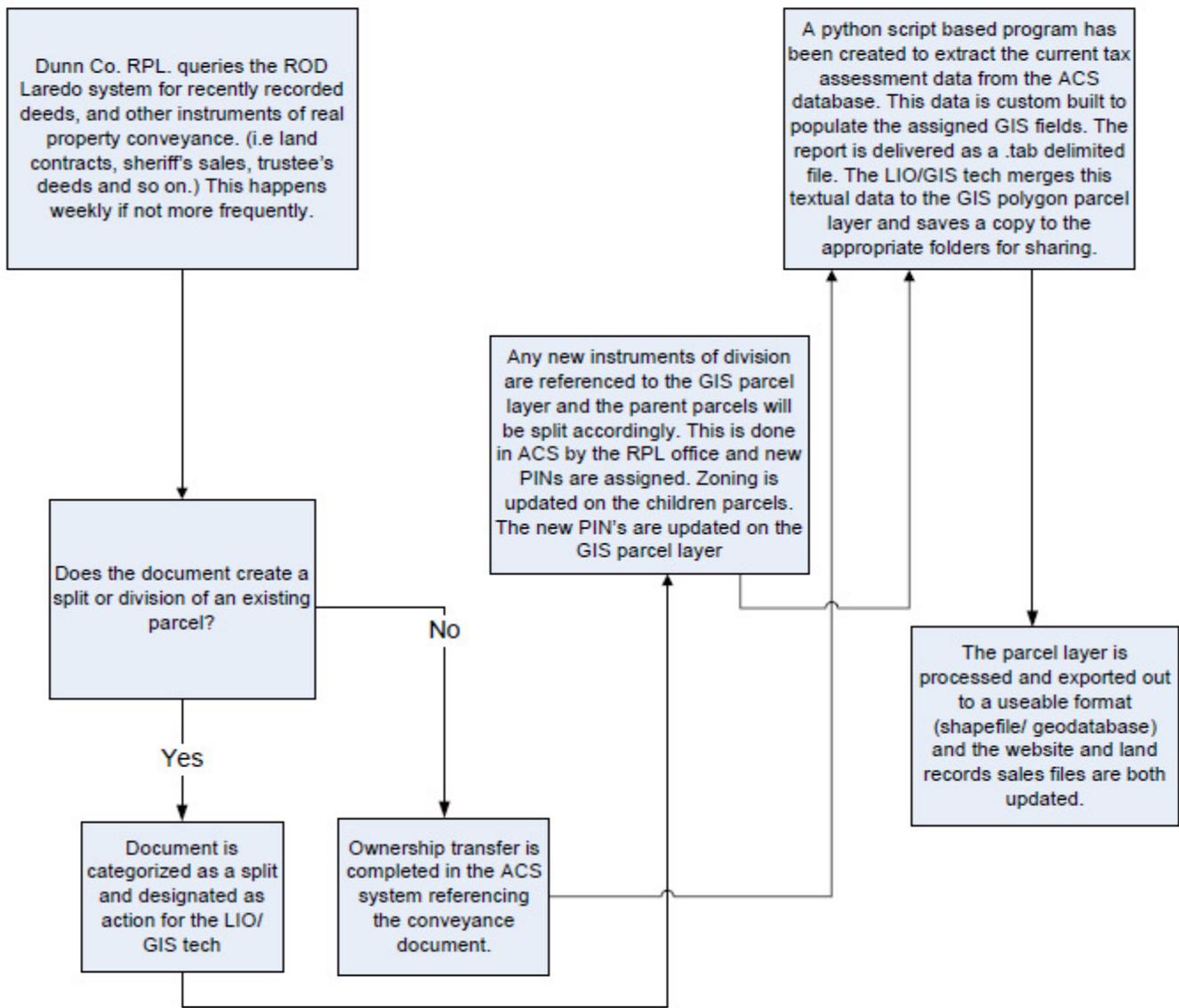
# Current Land Information System

Diagrams of County Land Information Systems

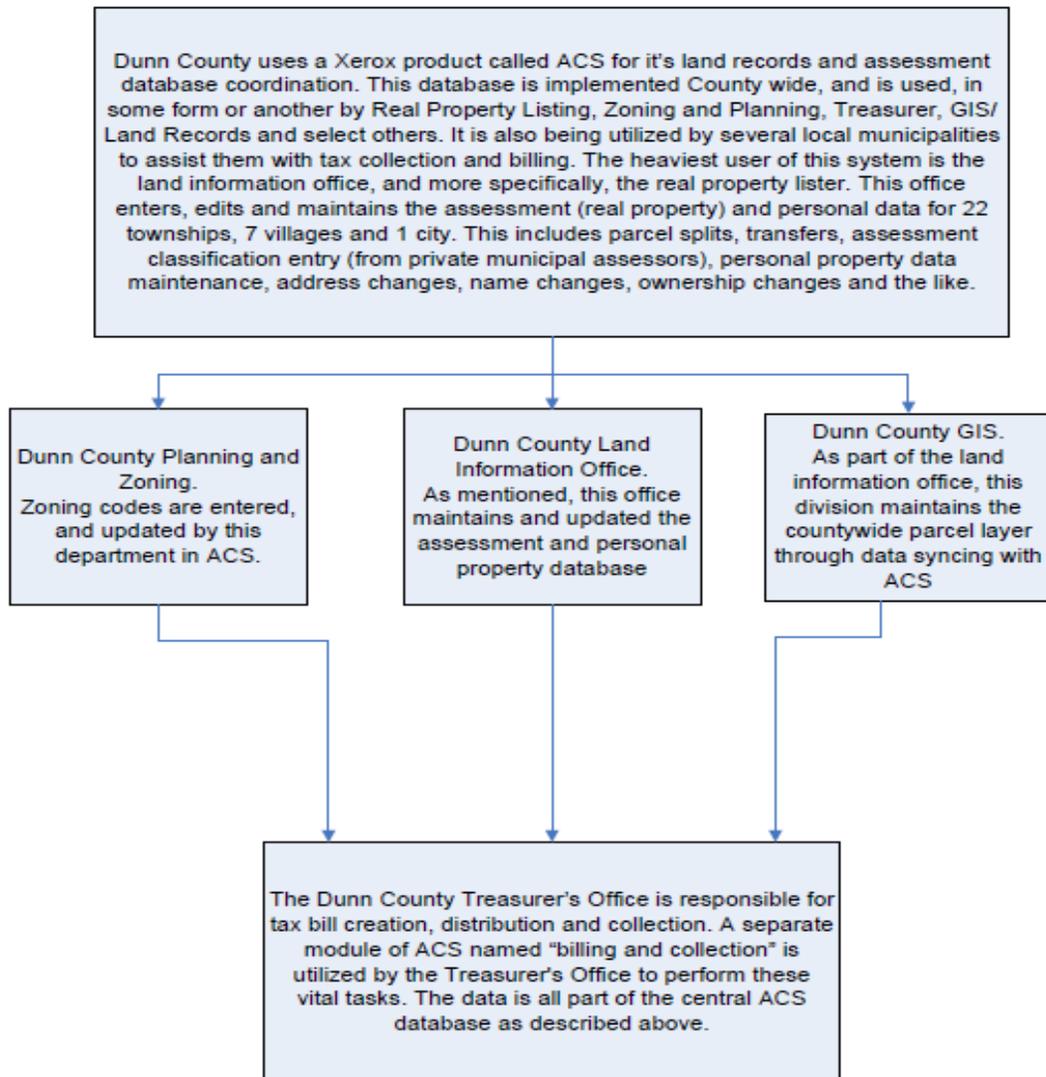
## PARCEL UPDATE (PLAT or CSM) TO GIS UPDATE (12/2015)



## PARCEL UPDATE (Deed or other) TO GIS UPDATE (12/2015)



## Assessment Data Maintenance and Tax Billing



## **Technology Architecture and Database Design**

Dunn County uses state of the art virtual servers using VMware vsphere 4.1 (vcenter) for Virtual Machine Management and ESX 4.1 and Microsoft Server 2008 R2 Hypervisor for Virtual Machine deployment to maintain all application and database systems and uses Microsoft SQL Server 2005 and 2008 for all internal database applications county wide. Dunn County utilizes Information Technology Infrastructure Library (ITIL) and PMI PMBOK project management and planning standards and methodologies. Gant charts are produce for project timelines. Dunn County utilized ITIL's operations, capacity planning, and change management methodologies for implementing and maintaining all Information Technology systems and follows best practices and industry standards for securing the County's infrastructure including AD Domain, strong password protection, firewalls, virus, malware, and spam filtering for all incoming data, intrusion detection, etc. to actively protect all the County's informational assets. For GIS based projects ESRI meta data (see below) and data modeling are developed and maintained for digital base layers and associated databases.

As with all information and the technology that supports it new needs arise and existing systems and data must be maintained. Dunn County stays current with the new technology, industry best practices and standards, attends appropriate training, and collaborates with both other government and private partners to maintain, enhance, and develop new systems to meet the needs of its internal and external customers. Currently, all of Dunn County's land information systems and data are maintained in-house are edited daily to maintain accurate and up to date information. In addition, the entire County's software and hardware systems that make up its Information Technology infrastructure are under maintenance and support agreements. Dunn County ensures the currency and continued maintenance of its land information and Information Technology infrastructure as indicated above by maintaining its data in-house and updating and archiving the data daily and by providing a 2016 Information Technology Operational, IT Capital Projects, and Land Information budget of approximately 2 million dollars to maintain and develop new Information Technology systems. The Wisconsin Land Information Plan assistance through retain fees, base budget grant, and the land records training grant provide revenue to supplement the Information Technology cost associated with implementing initiatives contained within this plan.

Dunn County follows best practices and industry standards for securing the County's infrastructure including AD Domain, strong password protection, firewalls, virus, malware, and spam filtering for all incoming data, intrusion detection, etc to actively protect all the County's informational assets.

### **Metadata and Data Dictionary Practices**

Metadata creation maintenance and updating is a designated weak spot in the infrastructure of Dunn County's GIS. Currently, we are utilizing older FGDC metadata that was developed when our datasets were first created. The age of this metadata varies from 5-10 years old, dependant on the dataset. As we become more streamlined and organized within the land records department, we need to allow staff time for, and budget against, the development and maintenance of compliant metadata. Normal work flow would assume that we use the tools within ArcGIS and ESRI software(s) to develop and maintain these

metadata datasets. Again, insufficient staff time and expertise is the biggest hurdle we face here.

## **Municipal Data Integration Process**

The Dunn County land information tax assessment database (ACS) is the main driver of our land records system. With over 35,500 parcels in 22 Townships, 7 Villages and 1 City, the interaction between each of these entities varies at any given time. The most rigorous interaction across these multi jurisdictional districts occurs at the taxation level. The real property lister, in coordination with the land information office, and the County treasurer, works daily on the collaboration between each local municipality and their assessor(s) and official(s). The primary result, and most often used, derivative of this work is the countywide GIS parcel, and the Dunn County tax portal database. This overreaching statement makes the assumption that the reader will realize that on any given day, a variety of phone calls, e-mails, walk in visits, and any other land records related situation may be presented to the land records staff. These are handled on a case by case basis and an excellent customer user experience is our end goal.

## **Public Access and Website Information**

The Dunn County main website <http://www.co.dunn.wi.us/> is the window to all of the County Information. On the welcome/main page, there are shortcut links to our GIS web mapping site, and our tax portal system. These are our most often publically viewed land records data resources. Within either of these systems, the user can obtain general information about any certain parcel of land, including, but not limited to, ownership, school district, zoning, current taxed amount, current assessed amount, and the like. These fields, as mandated by the state parcel initiative, will be changed and modified in the coming year. At the time of this writing, Dunn County is in the process of contracting out the GIS web hosting to an outside vendor. The hope is to provide a consistent and universal web mapping experience for our end users. (i.e. something they are used to from using other county sites.) When that happens, we are planning on providing, not only a more robust searchable system, but also the ability to add survey PLSS tie sheets and other survey related data, to help free up staff to move the remonumentation program into high gear.

If applicable, describe use of contractors, consultants, and/or third-party technology for access (e.g., specific web applications, consultants, software developers, offsite hosting).

## Public Access and Website Information – Example

Type of Website	Software or App	3 <sup>rd</sup> Party or Contractor	URL	Update Frequency/ Cycle
GIS webmapping site	<i>ArcGIS Server 10.0</i>	Dunn County “in House”	http://216.222.161.54/DunnCoGIS/default.aspx	Weekly
ROD land records search tools	<i>Laredo/Tapestry</i>	<i>Fidlar</i>	http://www.co.dunn.wi.us/index.asp?SEC=3AB04401-7C0E-45DF-9F34-D31B3D978AB5&Type=B_BASIC	Daily
RPL or tax parcel site	<i>In house python scripted system</i>	Dunn County	http://www.co.dunn.wi.us/index.asp?SEC={9A58141F-7203-4AB7-B8A4-F2F5BD6E217E}&Type=B_BASIC&persistdesign=none	As records are updated
Zoning information (as requested)	<i>No dedicated app for zoning</i>	County Planning and Zoning Administrator	http://www.co.dunn.wi.us/index.asp?SEC=35C0A71F-A21D-4857-893A-4882F07A4E2D&Type=B_BASIC	as needed
PLSS tie sheets (all tie sheets are pdf)	<i>Surveyor distributes on an individual basis</i>	County Surveyor	http://www.co.dunn.wi.us/index.asp?SEC=C47F3F62-6FBC-4F8B-9165-B6DD818889F5&Type=B_BASIC	Case by case
Land Information Services	Varies	LIO	http://www.co.dunn.wi.us/index.asp?SEC=167E4DFA-FBE3-4631-ABD2-C10831198815&Type=B_BASIC	Rural addressing and land records sales

## Data Sharing

### Data Availability to Public

The following excerpts are from the Wisconsin Public Records Law Wis. Stat. ss 19.31-19.39 Compliance outline dated September 2012

ii. “Land information” means any physical, legal, economic or environmental information, or characteristics concerning land, water, groundwater, subsurface resources, or air in Wisconsin. It 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 restriction, 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. Stat. § 66.1102(1)(a), incorporating by reference Wis. Stat. § 59.72(1)(a).Data Sharing Restrictions

also

2. Copy and transcription fees may be charged.

Dunn County offers specific land records datasets for public availability as designated within the Land Information Ordering Process section of the Dunn County main website.

[http://www.co.dunn.wi.us/index.asp?SEC=21062146-9437-4D06-A484-28338E0F6FFA&Type=B\\_BASIC](http://www.co.dunn.wi.us/index.asp?SEC=21062146-9437-4D06-A484-28338E0F6FFA&Type=B_BASIC)

In compliance with stated item 2 above, from the referenced open records document, Dunn County charges a nominal \$20.00 copy and transcription fee for any data provided.

### Data Sharing Restrictions

Once Dunn County Land Records data is purchased, and delivered, Dunn County has no restrictions as to how that data is used.

Regarding the Dunn County GIS website: There is a disclaimer of liability, embedded within the map, and also added to any printed copy from said website mapping page.

“The information depicted on this map is a compilation of public record information including aerial photography and other base maps. No warranty is made, express or implied,

as to the accuracy of the information used. The data layers are a representation of current data to the best of our knowledge and may contain errors. It is not a legally recorded map and cannot be substituted for field-verified information. Map may be reproduced with permission of the Dunn County Administrative Coordinators Office. Errors should be reported to the GIS Division, 800 Wilson Ave, Menomonie WI 54751. Phone (715) 231-6505.

Copyright © 2013”

Regarding the Dunn County Tax Portal: There is also a disclaimer of liability that the public user must agree to before they are allowed access to the site.

**“LEGAL NOTICE & DISCLAIMER**

Tax Portal information is provided on an “AS IS” basis and is for reference only. While every effort is made to keep the information in the Tax Portal current and accurate, it is generated from other databases and may be incomplete, inaccurate or out-of-date. Dunn County assumes no responsibility for errors or omissions and does not guarantee accuracy, currency, or completeness, or that access will not be interrupted.

Use of the Tax Portal is at your own risk. Dunn County assumes no liability for any loss, or direct or indirect, special, incidental, or consequential damages, including, but not limited to, time, money, or goodwill, arising from the use or modification of Tax Portal information. Tax Portal information is not intended to serve as official records and should not be used for making financial or other commitments.

Your use of the Tax Portal constitutes your acceptance of these terms. To access the Tax Portal, click the AGREE button. If you do not accept these terms, click the DISAGREE button and you will be returned to the Dunn County Home page.”



## **Government-to-Government Data Sharing**

Dunn County has collaborated with other Governmental agencies over the past 15 years. Recently, a data sharing agreement document has been drafted to use in these circumstances. Some of the past cooperative efforts have included projects in conjunction with U.W. Stout, U.S. Army, the Wisconsin Department of Natural Resources, and others.

## **Training and Education**

With short staffing and limited time/work constraints, it is sometimes difficult to find the appropriate times to self educate and train. Dunn County utilizes the WLIP grant training remuneration to allow staff to attend the WLIA annual conference, The Wisconsin Society of Land Surveyors annual conference, the ESRI user’s group annual conference, the Wisconsin Land Title Association training seminars, and other miscellaneous training as needed. It is a priority for the land information office to keep up to date on the happenings within the State on both a political and technological stage.

## CURRENT & FUTURE PROJECTS

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### Projects Related to Strategic Initiative Grants

#### Achieve searchable parcel format for benchmarks 1 and 2 (As related to the Dunn County parcel layer, and the Statewide Parcel Initiative.)

##### **Project Description/Goal**

The Dunn County parcel layer, and its underlying attribute data, is a work in progress. Act “20”, as it relates to Wisconsin State Law, has mandated that our County provide an organized, standardized and searchable parcel layer for inclusion into a statewide parcel map. As described within previous parts of this document, there are many moving pieces to our current parcel mapping system. The focus of this project will be to research, develop, document and then finally provide, said parcel map to the State that will meet their mandated elements. The foundational elements impacted by this far reaching project include, but are not limited to, the Dunn County GIS parcel layer, the Dunn County Zoning data/mapping, the Dunn County addressing database/mapping and the PLSS (Public Land Survey System) element of this plan.

##### **Business Drivers**

This project will affect and involve many departments including Environmental Services, Land Information, Treasurer, Information Technology, and of course the political hierarchy structure that controls our day to day work. (The Dunn County Board of Supervisors and their controlling committees.) The D.O.A. provided documentation as related to “project plan to achieve searchable format for benchmarks 1 & 2”, as well as other state planning documents, will be used to plan, and achieve, our project milestones and deliverables.

##### **Objectives/Measure of Success**

The State of Wisconsin Department of Administration, in conjunction with the State Cartographers Office, has developed several planning documents that will guide us along the milestones that need to be reached to produce the deliverable product. Dunn County will use these planning documents as a frame reference for completing each required element along the way. Our end goal is to have an accurate, searchable, parcel dataset that can be easily processed, updated, downloaded, and delivered, and that this dataset will meet Act 20 requirements as mandated by the State. (see figure below for a state suggested timetable.)

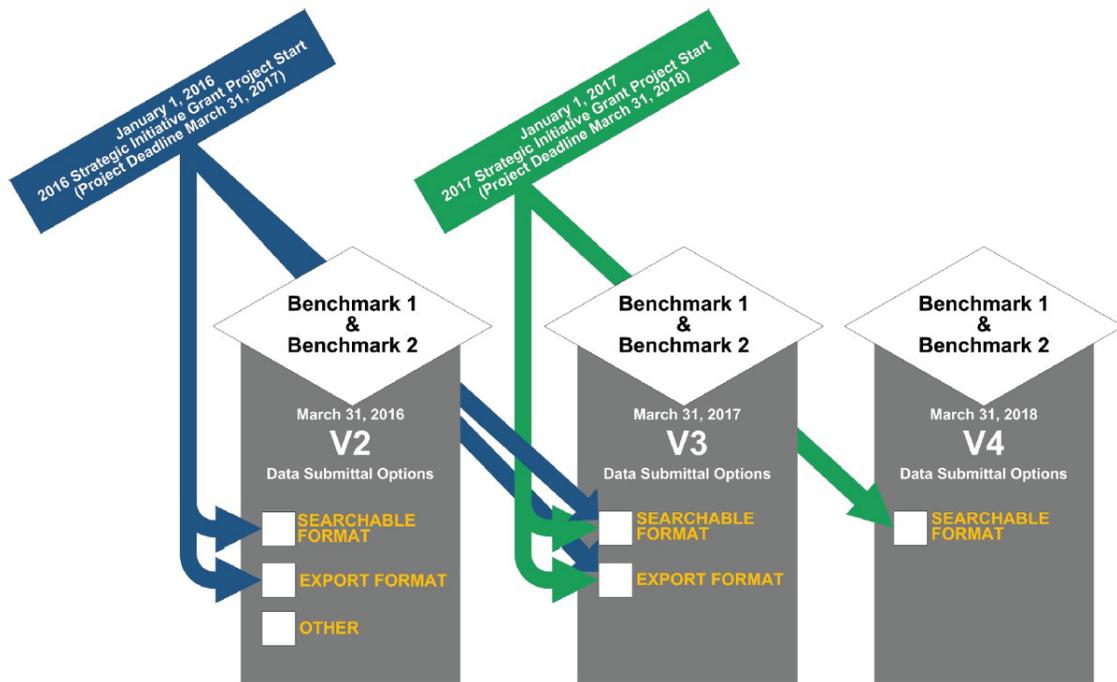


Figure 2. Strategic Initiative grant project timeline, where projects can span a calendar year plus one quarter

## Project Timeframes

**January and February 2016;** develop and integrate the required fields needed to achieve an **export** parcel format. This is the more flexible option of the two submittal schemas (searchable, which is our end goal, and export, which allows more flexibility as we streamline our processes.) This includes, but is not limited to, cooperation with the Dunn County Zoning Office to update, enter, and maintain the County zoning attributes, for each parcel, within the ACS assessment database framework. We will also harvest the most current PLSS information available, and organize a schedule and process to keep updated when new remonumentation information is available.

**March 2016;** an export formatted parcel layer completed for state submission to the statewide parcel map project.

**March 2016 through March 2018;** Continued PLSS progress and updating as the new section corners, and/or their coordinates are added to the fabric. (Subject to work schedules of the Dunn County Surveyor's Office.) Note: Dunn County currently does not require a completed municipality (e.g. Township) to be 100% remonumented for integration into the parcel fabric. Because of the history and structure of our existing parcel dataset, the problem areas within this feature class can be assessed and corrected, and/or adjusted, on a case by case basis. Often times these corrections are completed with the assistance of the County Surveyor's Office and their more accurate mapping, based on any updated PLSS in that particular area. This project relates to **Benchmark 4** of the statewide parcel map database project.

**March 2016 through March 2017;** develop and integrate the required (and suggested) fields needed to achieve a **searchable** parcel format. We will also need to integrate the assessment database, as well as the zoning attributes into our polygon layer. Standardization of the Dunn County address layer also needs to be completed. These updated and streamlined attributes and databases will then be developed and integrated as part of the state wide parcel layer deliverable. This will involve extensive collaboration and integration with several departments, and most specifically the Land Information Office, with the Information Technology Department.

## Responsible Parties

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

Under the direction of the County Manager, the Dunn County Land Information Office, in collaboration with the Dunn County Surveyor's Office, the Real Property Lister, and the Dunn County Information Technology Division will provide support throughout this process. Other Departments may be invited to participate if needed.

## Estimated Budget Information

**See appendix "H" "Estimated Budget Information" for all provided projects.**

### **Project Plan for Parcel Completion (Benchmark 3)**

#### **Project Description/Goal**

Current status of parcel data

- The Dunn County digital parcel currently consists of 35,545 digitized polygon features. (12/15/2015 data) This is all inclusive of our entire taxable parcel within the County assessment database. Approximately 760 of these 35,545 polygons (2%) do not have parcel identification numbers (PIN) assigned to them. These include right of way parcels, underwater parcels, and other miscellaneous pieces that fall outside the realm of being assessable land. It is our intent to correctly map these rights of way, and others, and place a correct designation and matching PIN so they can be included into a searchable parcel layer.

Goals

- As mentioned this dataset involves about 760 parcels that need to be individually inspected and researched. Then the appropriated staff will follow our documented steps to create a new PIN and then finally add the data describing what the parcel is intended to represent.

Planned approach

- As staff time allows, we will conduct research on each of these 760 parcels, re-map them if necessary, and then add the proper attributes to our assessment database system. This method should then allow integration into a searchable parcel map format.
- Although PLSS completion may not be a requirement for this "cleanup" work, it is assumed that since many of these unattributed parcels are road right of way, the cooperation of the Dunn County Surveyor's Office may be an integral part of the re-mapping process. Note that the Surveyor's Office often assists the Dunn County Highway Department with road right of way mapping, and also maintains the digital and paper copies of the road right of way records.

## **Business Drivers**

This project will affect and involve many departments including Environmental Services, Land Information, Surveyor, Information Technology, and of course the political hierarchy structure that controls our day to day work. (The Dunn County Board of Supervisors and their controlling committees.) The D.O.A. provided documentation for “project plan for parcel completion”, as well as other state planning documents, will be used to plan, and achieve, our project milestones and deliverables.

## **Objectives/Measure of Success**

The objective is to meet Benchmark 3 (Completion of County Parcel Fabric) by March of 2018.

## **Project Timeframes**

The project time frame for this parcel maintenance would be throughout this modernization plan time span of 2016 through 2018, as staff time and budget allows.

## **Responsible Parties**

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

Under the direction of the County Manager, the Dunn County Land Information Office, in collaboration with the Dunn County Surveyor’s Office, the Real Property Lister, and the Dunn County Information Technology Division will provide support throughout this process. Other Departments may be invited to participate if needed.

## **Estimated Budget Information**

**See appendix “H” “Estimated Budget Information” for all provided projects.**

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

### **Project Description/Goal**

#### Planned approach

- Currently, the Dunn County Surveyor’s Office is actively underway remonumenting new corners, and maintaining existing corners in Dunn County.

#### Current status

- Please see the PLSS chart located in foundational elements above for current status

#### Goals

- After discussing this section with Tom Carlson, P.L.S., the Dunn County Surveyor, his goal is to achieve survey accurate coordinates on as many corner as he can visit in a year. Other variables come into play including previous

incorrectly placed corners, obliterated corners, and time spent away from remonumentation on other countywide projects.

#### Missing corner notes

- Any missing corners will be assumed to not have Dunn County Survey grade coordinates on them. Note that 625 of the 2,800 (22%) available corners do not have survey grade coordinates on them at this time.

#### County boundary collaboration

- Current efforts are underway to collaborate with other, shared, County adjoiners to establish and remonument corners and provide survey grade coordinates universal to all systems.

## **Business Drivers**

This project will affect and involve many departments including Environmental Services, Land Information, Surveyor, Information Technology, and of course the political hierarchy structure that controls our day to day work. (The Dunn County Board of Supervisors and their controlling committees.) The D.O.A. provided documentation for “project plan for PLSS”, as well as other state planning documents, will be used to plan, and achieve, our project milestones and deliverables.

## **Objectives/Measure of Success**

The objective/measure of success is not as easily defined here, as in other projects described. The County Surveyor has indicated that many years of work are needed to bring 100% remonumentation status to the Dunn County PLSS. Milestones will not be added at this time. It is accurate to say that the Dunn County Surveyor’s Office and staff are diligently working to achieve this end goal.

## **Project Timeframes**

As an ongoing project, the remonumentation process will span the 3 years inclusive in this plan, as well as many years to come.

## **Responsible Parties**

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

The Dunn County Surveyor’s Office consists of 1 County Surveyor (full time/licensed); 1 Registered Land Surveyor (full time/licensed) and 1 Survey Technician (full time.)

## **Estimated Budget Information**

**See appendix “H” “Estimated Budget Information” for all provided projects.**

# Projects Not Related to Strategic Initiative Grants

## **Project #1: Transitioning Public GIS Web portal to an outside vendor**

### **Project Description/Goal**

Our current GIS web portal is supported, “in house” on an older, out of the box, version of ESRI ArcGIS Server. The project is to outsource our GIS public mapping to a local vendor.

### **Business Drivers**

- The in house mapping site is hosted on an older software and not user friendly to the general public.
- Outsourcing to an established outside vendor will standardize the data, as well as adding much needed user functionality to the public geospatial experience.
- Decrease calls and complaints regarding our current system.
- Streamlining data creation and migration to the newly hosted servers.
- Allowing hard copy (pdf) documents to be easily retrieved from the system. (See Surveyor tiesheet project below.)

### **Objectives/Measure of Success**

- General positive feedback from public website users.
- Positive response from other County, and Municipal departments utilizing this public mapping system.

### **Project Timeframes**

<b>Milestone</b>	<b>Duration</b>	<b>Date</b>
Project #1 start	–	January 2016
Research and develop data delivery process	2 months	January 1–February 27 2016
Index tie sheet and other records	4 months	March 1–Sept 30, 2016
Coordinate mapping structure with vendor	Throughout	
Project Complete	–	September 30, 2016

### **Responsible Parties**

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

Under the direction of the County Manager, the Dunn County Land Information Office, in collaboration with the Dunn County Surveyor’s Office, the Real Property Lister, and the Dunn County Information Technology Division will provide support throughout this process. The chosen outside consultant (vendor) will participate in the transition period, as well as the updating and maintenance of this new web portal system. Other Departments may be invited to participate as needed.

## Estimated Budget Information

See appendix “H” “Estimated Budget Information” for all provided projects.

### Project #2: Adding digital tiesheets to the public mapping portal

#### Project Description/Goal

Dovetails with “project #1” above; Once our public website is transitioned to a private consulting hosting environment, the digital (pdf) PLSS survey monument records (tiesheets) will be available for downloading from that site.

#### Business Drivers

- Too much County Survey Office staff time is being spent providing these documents to private and other government surveyors.
- The availability of these documents on line will assist the private surveyor in their day to day work, eliminating the possibility of errors and poor field decisions if the tiesheets aren’t in hand.
- Allowing other hard copy (pdf) documents to be easily retrieved from the system. If this project is successful, other survey documents, such as maps of surveys and coordinate files may be added to the retrieval process.

#### Objectives/Measure of Success

- General positive feedback from public website users and private surveyors.
- Positive response from other County, and Municipal, Departments utilizing this public mapping system.
- Time savings for County Survey Office staff, so they may focus on more relevant and important work such as remonumentation.

#### Project Timeframes

Milestone	Duration	Date
Project #1 start	–	January 2016
Research and develop data delivery process	2 months	January 1–February 27 2016
Index tie sheet and other records	4 months	March 1–Sept 30, 2016
Coordinate mapping structure with vendor	Throughout	
Project Complete	–	September 30, 2016

#### Responsible Parties

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

Under the direction of the County Manager, the Dunn County Land Information Office, in collaboration with the Dunn County Surveyor’s Office, and the Dunn County Information Technology Division will provide support throughout this process. The chosen outside consultant (vendor) will participate in the transition period, as well as the updating and

maintenance of this new web portal system. Other Departments may be invited to participate as needed.

## **Estimated Budget Information**

**See appendix “H” “Estimated Budget Information” for all provided projects.**

### **Project #3: Updating the E911 Emergency Mapping Center Mapping**

#### **Project Description/Goal**

Current E911 mapping is on an older software called GeoLynx. The existing version of this software is outdated and does not integrate well with the more current desktop versions of ArcMap and ArcGIS that are available to the County.

#### **Business Drivers**

- Currently an older version of ArcMap 9.3.1 is needed to maintain, update and improve the E911 geospatial mapping and dispatch system. As the County upgrades the desktop versions of ArcMap, this older 9.3.1 version is become outdated and is no longer supported.
- Too many unnecessary steps are needed to maintain and update the E911 mapping environment. Errors are easily made as we go back and forth between newer and older versions of mapping and the associated geodatabases.

#### **Objectives/Measure of Success**

- Seamless integration between the newer versions of ArcMap, and the E911 mapping system.
- Positive response from other County, and Municipal departments utilizing this public mapping system.
- Effective and accurate dispatch scenarios for any given incident.
- User friendliness to the E911 dispatcher. (These dispatch positions do not usually require any GIS mapping/navigation experience.)

#### **Project Timeframes**

Milestone	Duration	Date
Project #1 start	–	March 2016
Research and develop data migration process	2 months	March–May 2016
Updating the GIS and underlying data to allow a trouble free migration across these newer versions.	4 months	May–Sept 2016
Testing and troubleshooting	2 weeks	Sept 2016
Project Complete	–	December 2016

## **Responsible Parties**

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

Under the direction of the County Manager, the Dunn County Land Information Office, in collaboration with the Dunn County Surveyor's Office, the Dunn County Emergency Management Department, and the Dunn County Information Technology Division will provide support throughout this process. The chosen outside consultant (vendor) Geolynx/GeoComm will participate in the transition period and testing. Other Departments may be invited to participate as needed.

## **Estimated Budget Information**

**See appendix "H" "Estimated Budget Information" for all provided projects.**

### **Project #4: Developing the Land Development Office module (LDO) within the ACS tax database system.**

#### **Project Description/Goal**

As part of the Xerox (ACS) assessment database software, there is a dedicated module that is designed for the planning, zoning and surveying aspect of land records. To this date Dunn County has not utilized that module.

#### **Business Drivers**

- Currently, a very old legacy software called reflections is driving the database for zoning and their sanitation systems and building permit tracking. This system is proving to be unreliable and unstable. A viable replacement will be needed in the very near future.
- Tracking a sanitary permit or building permit to the actual parcel within the assessment database would prove invaluable across a variety of disciplines.
- The current legacy system is not conducive to reporting and tracking.
- With the new zoning regulations that were adopted in October of 2014, it will be beneficial to the zoning office to track density and splits as related to an individual parcel or parcels, dependent upon each zoning classification.
- The Dunn County Surveyor's Office can use this system to track parcel divisions, from beginning to end, throughout the subdivision review process.
- The Dunn County Health Department inspects and monitors new and existing wells. This process is currently being done in an excel spreadsheet environment. Integrating LDO into their day to day workflow should help organize and automate that process as it links each record to an individual parcel in the assessment database.

#### **Objectives/Measure of Success**

- Better organization, record keeping, reporting and data retrieval would be a desired product of this integration.

- Positive response from other County, and Municipal departments utilizing this LDO system.
- Better planning information and tools available to the County Planners.
- Streamlined and organized information for tracking minor and major land divisions.

## Project Timeframes

Milestone	Duration	Date
Project #1 start	-	March 2016
Research and develop data migration process	2 months	March–May 2016
Extract and migrate existing data out of the current system and in to the new database structure.	4 months	May–Sept 2016
Testing and troubleshooting	1 month	Sept 2016
Project Complete	-	March 2017

## Responsible Parties

The Dunn County Land Information Division is under the authoritative powers of the Department of Administration. All policies, ordinances and decisions are discussed and proposed at that level. Any ordinance or policy changes are discussed, proposed, and then moved to the full County Board.

Under the direction of the County Manager, the Dunn County Land Information Office, in collaboration with the Dunn County Surveyor’s Office, the Dunn County Zoning Office, the Dunn County Land Conservation Division and the Dunn County Information Technology Division will provide support throughout this process. The chosen outside consultant (vendor) Xerox will participate in the transition period and testing. Other Departments may be invited to participate as needed.

## Estimated Budget Information

**See appendix “H” “Estimated Budget Information” for all provided projects.**

## End Projects

## **Ongoing Costs Not Associated with a Specific Project**

Note that throughout this 3 year period, normal, everyday land records work is being performed. With a limited staff of dedicated land records employees, the delegated work to keep the County on track is a priority. Taxes must go out; maps and E911 updates must be maintained; zoning maps must be current; assessment coordination is essential; Public land records requests, including the public GIS site must be maintained, to name a few. These are collectively and inclusively a part of the ongoing costs that may not be associated with the Act 20 project and the monies allocated through the WLIP grant dispersal.

### **Summary**

This document is both a historical look at where Dunn County land records has been and how it has evolved, and also a visionary statement of the direction of where our land records program is heading in the near future. The time spent while compiling the information hereon has been a learning experience, identifying both our weaknesses, and our strengths within the Dunn County land records program.

By indentifying these flaws and successes, the groundwork becomes clearer as to what we should be repeating, and what may need attention and overhauling. It is the intention of this writer to improve, promote and develop the continuing legacy of Dunn County land records, for this generation and generations to come.

Steve Kochaver, LIO

## Appendices:

### Appendix "B"

#### **59.45 County surveyor; duties, deputies, fees.**

**(1) SURVEYOR; DUTIES.**

**(a)** The county surveyor shall do all of the following:

1. Execute, personally or by a deputy, all surveys that are required by the county or by a court. Surveys for individuals or corporations may be executed at the county surveyor's discretion.
2. Make, personally or by a deputy, a record, in books or on drawings and plats that are kept for that purpose, of all corners that are set and the manner of fixing the corners, of each survey made personally, by deputies or by other professional land surveyors and arrange or index the record so it is an easy-to-use reference and file and preserve in the office the original field notes and calculation thereof. Within 60 days after completing any survey, the county surveyor shall make a true and correct copy of the foregoing record, in record books or on reproducible papers to be furnished by the county and kept in files in the office of the county surveyor to be provided by the county. In a county with a population of 500,000 or more where there is no county surveyor, a copy of the record shall also be filed in the office of the regional planning commission which acts in the capacity of county surveyor for the county.
3. Furnish a copy of any record, plat or paper in the office to any person on demand and upon payment to the county of the required fees.
4. Administer to every survey assistant engaged in any survey, before commencing their duties, an oath or affirmation to faithfully and impartially discharge the duties of survey assistant, and the deputies are empowered to administer the same.
5. Perform all other duties that are required by law.

**(b)** Surveys for individuals or corporations may be performed by any professional land surveyor who is employed by the parties requiring the services, providing that within 60 days after completing any survey the professional land surveyor files a true and correct copy of the survey in the office of the county surveyor. In counties with a population of 500,000 or more the copy shall be filed in the office of the register of deeds and in the office of the regional planning commission which acts in the capacity of county surveyor for the county.

**(2) SURVEYOR; DEPUTIES.** The county surveyor may appoint and remove deputies at will on filing a certificate thereof with the clerk.

**(3) SURVEYOR; FEES.** In addition to the regular fees of professional land surveyors that are received from the parties employing the county surveyor, the county surveyor may receive a salary from the county.

**History:** [1995 a. 201](#) ss. [328](#), [389](#), [391](#), [399](#); [1997 a. 35](#); [2013 a. 358](#).

Compensation and duties of an elected county surveyor and possible conflicts of interest in public contracts are discussed. 60 Atty. Gen. 134.

Duties of county and other land surveyors and minimum standards for property surveys are discussed. 69 Atty. Gen. 160.

**59.46 Penalty for nonfeasance.** Any county surveyor, any city, village, or town engineer, or any professional land surveyor who fails or refuses to perform any duty required of that person by law shall forfeit not less than \$25 nor more than \$50 for each such failure or refusal.

**History:** [1991 a. 316](#); [1993 a. 246](#); [1995 a. 201](#) s. [401](#); Stats. 1995 s. 59.46; [2013 a. 358](#).

## Appendix "C" anatomy of Dunn County Parcel Index Number (PIN)

### FORMAT OF PARCEL INDEX NUMBER (PIN)

Digit

1-2 County ID: 17  
3-5 Municipality ID: 000-251  
6 West of 4th Principal Meridian: 2  
7-8 Township: 26-31  
9-10 Range: 11-14  
11-12 Section: 01-36  
13 1/4 Section

0: Government Lot

1: NE 1/4

2: NW 1/4

3: SW 1/4

4: SE 1/4

14-15

1/4-1/4 Section

10: NE 1/4-1/4

20: NW 1/1-1/4

30: SW 1/4-1/4

40: SE 1/4-1/4

Fractional

50: N 1/2 of the xx 1/4

60: E 1/2 of the xx 1/4

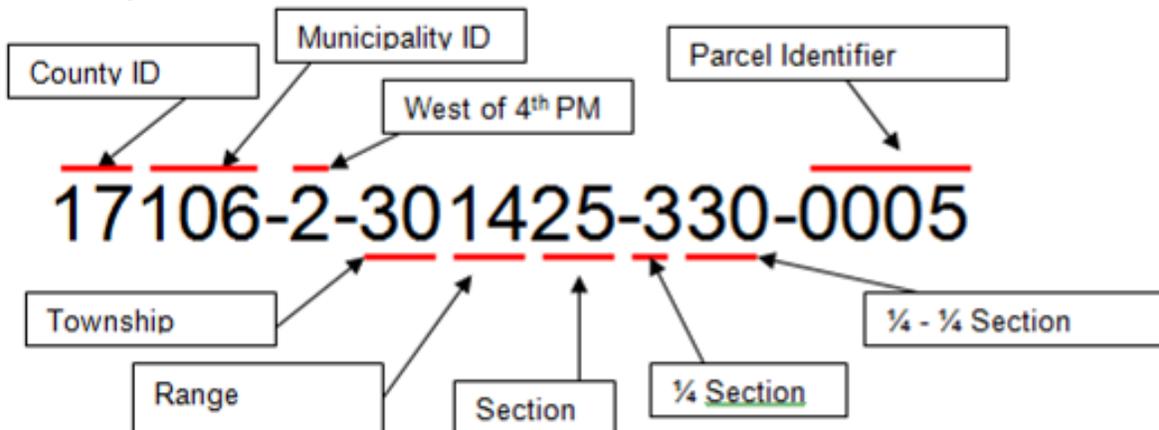
70: W 1/2 of the xx 1/4

Example: 250: N 1/2 of the NW 1/4

16-19

Parcel Identifier: 0000 - Max. Number of Parcel Divisions

**Example:**

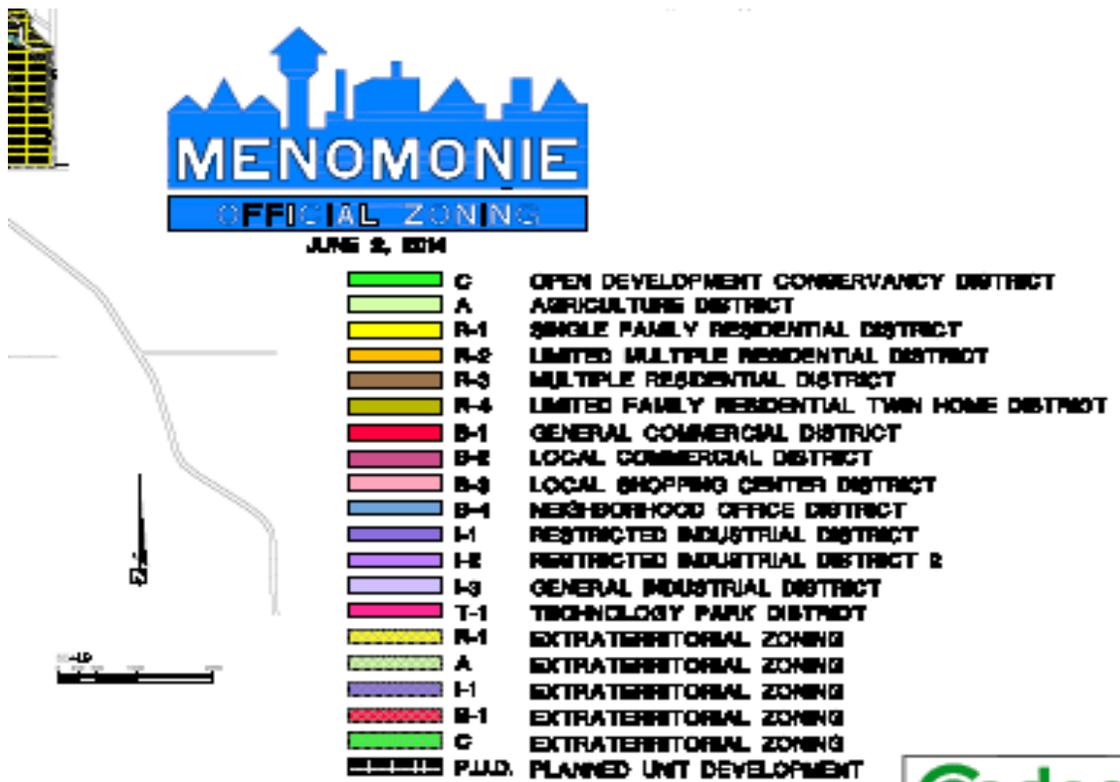


## Appendix “D” Current County Zoning Code Designations (17 of 22 Towns have adopted County Zoning)

13.2.1 Districts For the purpose of this ordinance the county is hereby divided into zoning districts which shall be as follows: more detail can be found on the Dunn County Zoning website [http://www.co.dunn.wi.us/index.asp?SEC=0316E199-3C27-4E54-9333-AA0DBDA3B659&Type=B\\_BASIC](http://www.co.dunn.wi.us/index.asp?SEC=0316E199-3C27-4E54-9333-AA0DBDA3B659&Type=B_BASIC)

- 1 Residential District (R1)
- 2 Residential District (R2)
- 3 Residential District (R3)
- 4 Intensive Agriculture District (IA)
- 5 Primary Agriculture District (PA)
- 6 General Agriculture (GA)
- 7 Limited Commercial District (LC)
- 8 General Commercial District (GC)
- 9 Light Industrial District (LI)
- 10 Heavy Industrial District (HI)
- 11 Shoreland & Recreational District (SR)
- 12 Non-metallic Mining Overlay District (NMM)
- 13 Conservancy District (CON)

Although not administered by Dunn County, zoning codes are populated, and updated, upon request, for the City for Menomonie. Those designations are shown on the figure below.





- Provides information on real property in the county to municipal assessors, clerks, treasurers, county officials, title companies, attorneys, realtors, property owners, and the general public.
- Records and reports errors to appropriate parties when found in conveyances and related legal documents in regards to real property records and ownership and notifies county zoning and surveying offices of zoning and/or subdivision ordinance violations.

Maintains and updates records pertaining to personal property assessments such as business equipment and occupational tax lists in all municipalities in County.

- Furnishes municipal assessors with listings of personal property as working documents for assessment purposes.
- Furnishes municipal assessors and clerks with reports on the valuation of personal property and finalizes this report for taxation purposes.

Prepares and enters real property related information into the County's automated Land Assessment Office system and provides appropriate information to municipal assessors, clerks, and treasurers to carry out the assessment and property tax processes.

- Furnishes each municipality with a listing of real property to be used as a working document for new assessments.
- Notifies municipal assessors of new land divisions (splits) and other actions potentially affecting assessments.
- Enter valuation changes submitted by municipal assessors and prepare associated reports.
- Enter Board of Review valuation changes and prepare related reports for municipal assessors and clerks.
- Provides municipal assessors and clerks with summary reports of the total valuation of real property and finalizes the valuation for the annual taxation process.
- Provide general assistance to municipal clerks with Board of Review process.
- Review records of real estate transfers and conveyances for use in maintaining real property descriptions.
- Verify Managed Forest Lands information from the county agrees with the Department of Natural Resource's Managed Forest Land reports.

- Print Notice of Assessments for Real and Personal Property.
- Print assessment roll and associated reports.
- Electronically file Statement of Assessment with Wisconsin Department of Revenue

### **OTHER JOB FUNCTIONS**

Performs related work as required or directed.

### **POSITION QUALIFICATIONS**

High School diploma or the equivalent; three years experience in a real property assessment environment or related field and computer recordkeeping; technical training in real property information and records preferred; or any equivalent combination of training and experience that provides the following knowledge, abilities, and skills:

- Considerable knowledge of laws, regulations, and procedures relating to real property descriptions and all public records and conveyances related to real property for the State of Wisconsin.
- Considerable knowledge of property appraisals and tax assessment process and legal descriptions of land and ability to interpret legal descriptions, legal documents, conveyances, and official data to determine property ownership for the State of Wisconsin.
- Ability to use modern Land Assessment Office database application in order to develop and maintain real property list for purpose of developing tax bills.
- Knowledge of County ordinances and regulations.
- Ability to maintain effective working relationships with local officials, assessors, realtors, attorneys, and the general public.
- Knowledge of mathematics and arithmetic calculations.
- Ability to secure facts through investigation and inspection and to effectively analyze and interpret factual data.
- Ability to communicate effectively, orally and in writing.

## Appendix “F” Dunn County LiDAR Accuracy Assessment Report

### Dunn County, Wisconsin LIDAR PROJECT

#### ACCURACY ASSESSMENT REPORT

##### PROCESS DESCRIPTION

Raw LIDAR range, GPS and IMU data was imported into Applanix Posproc software and Optech's REALM software and processed to final first return and last return x y z i point files in UTM NAD 83, zone 15, ellipsoid meters . The ASCII point files were converted to Wisconsin County Coordinate system Dunn County coordinates, NAVD88 US Survey Foot and GRS80,US Survey Foot using GEIOD03 in WIScon V2.2. Removal of vegetation and other above ground features was completed in Terrascan software V005. The LIDAR x y z i data was compared to ground control points and LIDAR flight lines that crossed said control points were vertically adjusted to best fit said points and called control lines. The remaining flight lines were then vertically adjusted to seamlessly match the control lines. Any remaining noise was removed from the LIDAR x y z bald earth point files to create a surface model of irregularly spaced points.

##### QUALITY CONTROL AND ACCURACY ASSESSMENT PROCEDURES

##### AREA COVERAGE

All LIDAR elevation measurements were imported into the project area polygon and checked and verified to be free of data voids or gaps, except in the bald earth surface model where voids or gaps were created by vegetation, buildings, water or other removed features.

##### AVERAGE RAW POINT DENSITY

No deviation was made from the planned survey parameters calculated to meet the required LIDAR average raw point density, therefore the average raw point spacing will be approximately the same as our planned flight as set forth below:

##### LIDAR Flight Parameters

Laser Firing Rate: 70000  
Altitude (ft. AGL): 4000  
Swath Overlap (%): 40  
Approx. Ground Speed (mph): 170  
Scan Rate (Hz): 38.0  
Scan Angle (°±): 21.0  
Computed Along Track Spacing (ft): 3.3  
Computed Cross track Spacing (ft.): 3.3  
Average Raw Point Spacing (ft.) 2.6  
Computed Swath Width (ft.): 3071  
Number of Lines Req'd: 74  
Line Spacing (ft.) 1843

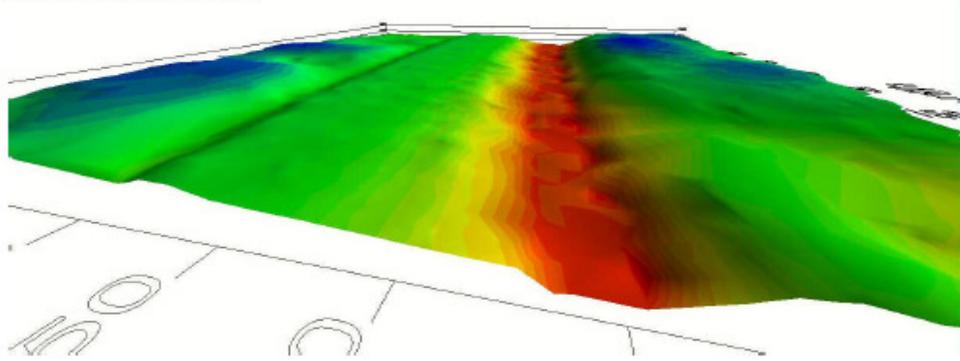
##### VERTICAL POSITIONAL ACCURACY

The LIDAR data was collected, processed and mapped under the direct supervision of professional land surveyors. Airborne GPS trajectories were carefully processed and analyzed with proprietary methods to produce long baseline solutions in the few centimeter range. Proprietary data analysis and adjustment methods were then utilized to form a LIDAR DTM model of both the first and last return surfaces that were best fit into static GPS ground control points that had been set to both control and validate the LIDAR survey. The vertical accuracy of the LIDAR DTM surface was then determined by comparing the best fit of the LIDAR DTM to the ground control points. Since the LIDAR DTM surface model was totally intact relative to the airborne trajectory, any point falling inside the DTM point coverage relative

to the GPS ground control network will produce similar vertical accuracies. Ground truth points were collected by Dunn County throughout the typical vegetation classifications around the county as shown on the attached spread sheet. The tested vertical accuracy was 0.52 foot (0.26 foot RMSE) at the 95% confidence level.

#### HORIZONTAL POSITIONAL ACCURACY

The horizontal accuracy of a LIDAR DTM surface is more difficult to validate than the vertical DTM comparisons to ground control, however, we have utilized the technique set forth hereafter and have successfully produced high accuracy LIDAR surveys for over 8 years that have been used for engineering planning and design. The LIDAR data was collected and processed as described above. Then the horizontal accuracy was analyzed by comparing data from opposing LIDAR flight lines having a 40% sidelap in flight coverage to the adjoining flight line. This gives a comparison of terrain features contiguous to one flight line overlapped and overlaid on top of the adjoining flight line. This produces millions of check points from each line as compared to the adjoining line. The overlapped data is carefully compared for alignment of features and checked for the clarity and consistency of said features. Specific sloping features are selected along the flight trajectory and at perpendicular angles. If there is any shift in the horizontal alignment of the LIDAR data from the adjoining line, it will appear as noise along the perpendicular sloped features. Shown below is a graphic used only to demonstrate this technique using all last return shots.



The above graphic is two overlapping flight lines along a perpendicular road surface with relatively steep side slopes. The color bands on the graphic are at 1 foot increments. You can see that small terrain relief features visible on the side slope of the road are almost in perfect alignment with very little noise. This indicates a very close alignment horizontally between the two flight lines. Using this method, we can determine that the horizontal accuracy of the LIDAR DTM is easily sub foot. A shift of 1 foot or more horizontally would have produced a very apparent roughness in the sides of the slopes along the road surface.

Dunn County, Wisconsin LIDAR Quality Assurance Data

Project Accuracy Statistics at 95%							Total #shots = 289-15 outliers=274
				Coefficient of Skew	-0.30		
				RMSE (ft.)	0.26		
		Std Deviation	0.26	Mean	0.04	Median	0.06
			Fully Covered Canopy-Trees				
RMSE by Category	Cultivated Field/crops	Paved		Short Grass	Tall Grass	Ground	
	0.21	0.25	0.37	0.28	0.23	0.26	

**Appendix "G"**

E911 Road Centerline Codes (RDCODE)

- 1) I94
- 2) USHwy
- 3) State Hwy
- 4) County Trunk Hwy
- 5) Township Road
- 6) City/Village
- 7) Not used
- 8) State Trail
- 9) Railroad

## Appendix “H” Estimated Budget Information

Project	Item	Unit Cost	Cost	Total Project Cost
<b>BM 1: Achieve searchable parcel format for benchmark 1</b>	a. LIO , real property lister, and IT staff	32.5% of \$50,000	\$16,250	\$16,250
<b>BM 2: Achieve searchable parcel format for benchmark 2</b>	b. LIO , real property lister, and IT staff	32.5% of \$50,000	\$16,250	\$16,250
<b>BM 3: Project plan for parcel completion (benchmark 3)</b>	b. LIO, GIS technician position	25% of \$50,000	\$12,500	\$12,500
<b>BM 4: Project plan for PLSS</b>	c. LIO, County Surveyor	10% of \$50,000	\$5,000	\$5,000
<b>Totals for strategic initiative grant requests</b>		100% of 50,000	\$50,000	\$50,000
<b>1. Transitioning Public GIS Web portal to an outside vendor.</b>	a. LIO, and IT staff		\$10,000	\$10,000
<b>2. Adding digital tiesheets to the public mapping portal</b>	c. LIO, County Surveyor and IT staff		\$1,000	\$1,000
<b>3. Updating the E911 Emergency Mapping Center Mapping</b>	d. LIO, IT staff and E911 staff	20% of \$100,000	\$20,000	\$100,000
<b>4. Develop the Land Information Development Office module (LDO) within the ACS tax database system</b>	f. LIO, IT staff and Planning/Zoning/Surveying staff	21% of \$90,000	\$19,344	\$90,000
<b>5. Training budget</b>	g. LIO and RPL	\$1,000	\$1,000	\$1,000
<b>Total budget information relating to grant allocation</b>			\$101,344	\$251,000