

Minutes
2019 WI Presidents Council Annual Meeting

March 5, 2019

Conference Room A/B, Dane County Extension Building, 5201 Fen Oak Drive, Madison, WI

Attendance

Association of Assessing Officers (None)

Association of Public-Safety Communication Officials (None)

County Surveyors Association (Bryan Meyer – La Crosse County, President)

County Treasurers Association (None)

Department of Administration (DOA) – Division of Intergovernmental Relations (Jim Giglierano – Wisconsin DOA, Geographic Information Officer)

Department of Transportation – Surveying and Mapping (DOT) (Keif Callaway – Wisconsin DOT, Plats Coordinator)

Land Information Association (Eric Damkot – Washington Co., Past-President, Peter Strand – Eau Claire Co., President, Tony Van Der Wielen – Legislative Tech. Services Bureau, President-Elect)

Land Information Council (Adam Derringer – Ayres Associates, Chair, Howard Veregin – SCO, Vice-Chair)

Land Information Officers Network (Lauree Ailik – Lafayette County, Chair)

Land Title Association (Sarah Hedtke – Midwest Title Group, Liaison Committee Co-Chair, Jonathan Sayas – Stewart Title Guaranty Co., Liaison Committee Co-Chair)

Real Property Listers Association (Kimberly Christman – Racine County, President, Brannick Beatse – Monroe County, President-Elect)

Realtors Association (None)

Register of Deeds Association (None)

Soc. of Land Surveyors (Frank Thousand – WSLs, Exec. Dir., Terry Van Hout – WSLs, President)

State Agency Geospatial Information Committee (Colter Sikora – Public Service Commission of Wisconsin, Chair)

State Cartographer's Office (SCO) (Howard Veregin – SCO, State Cartographer, Jim Lacy – SCO, Associate State Cartographer)

WI Chapter of National Emergency Number Association (None)

Call to order

Meeting called to order by Jim Lacy at 12:30 p.m.

Brief Follow-Up on Last Meeting

None

Discussion Topic #1: Emergency Operations Center may be moved to DOT per Governor Tony Evers' proposed Executive Budget. Little else is known at this time. (Mentioned by Strand, Damkot).

Discussion Topic #2: Safe at Home was mentioned to Lacy by Register of Deeds Association(?). Strand briefed on "Safe at Home" program to attendees. There will be challenges in running the program. Other, better ways for victims and others to have locations obscured, especially for parcel owners exist. Safe at Home only restricts/redacts address information.

Discussion Topic #3: PLSS Project (*See page ten for handout*) (Veregin) is an add-on to the statewide parcel project. Perceived needs this project addresses include:

1. (WLIA paper, per monuments in poor shape, not in existence, Land Surveyors: need for updated surveys, GIO: PLSS ranked high in layer requirements.
2. LandNet needs to be replaced w/more accurate alternative.
3. WLIP: Some of DOA money is supposed to go to monitoring PLSS maintenance.

Status: Ed. 0 version of PLSS delivered to stakeholders (not public, point only) in 2018. Ed. 1 will come out by the end of 2019. Will come from accurate county corners where available and LandNet where it is not. Will try to connect the history of corners through time and will contain a number of attributes to provide more information on monuments, including the General Land Survey history. See handout and SCO website for more. Bryan said he is glad to see this get off the ground. Question from Terry regarding accuracy of PLSS. Derringer asked about access to tie sheets and research material, is there any education being done to encourage project surveyor(s) to do their research and are counties doing enough to make research of tie sheets easy? Veregin responded that Survey Control Finder can be helpful along with county portals. Not all counties have portals to tie sheets, and some have pay walls. Questions from DOT (Callaway) also, especially in reference to 2022 geoid change. Ed. 1 will be point and line (down to quarter section survey). Question from Van Hout regarding old survey lines/points (ex. Brown County long lots). 60% of survey finder has ties to tie sheets.

Discussion Topic #4: Wisconsin Spatial Reference System 2022 (*See page eleven for handout*) (Veregin) covers NAD83/NAVD83 being replaced by NATRF2022/NAPGD2022. Will be dynamic, with epochs, to account for movement of tectonic plates, and issues in vertical datum. Will be based on GNSS, eliminates passive control (GNS monuments), and will affect the whole country. WSRS task force has been formed under WSLs. WSLs attempts to bring together all aspects of GIS industry to help support "unfunded mandate" by NGS. Discovery team meeting in August 2018 to determine how to set-up task force and figure out how to tie to State Plane Coordinate System. Made 5 focus groups. Met informally in the Dells in January, had first official meeting at WLIA in February. Focus groups formed and helped establish mission. Leaders of focus groups have been established (need 2nd person for Software/Hardware Focus Group). See handout and contact SCO for more. Help spread word, and/or participate in group by contacting leaders. NGS released notice tied to update of State Plan System. They will retain 3 zone system for state

plane coordinate systems and might do a redesign of one zone for Wisconsin and not individual counties (72). State discovery team asked NGS for 3 levels (statewide, 3 zone, and low-distortion (72 counties)) anyway. March 7, NGS will have webinar with update on these things (open to anyone, but must register). VDW asked if we have/need to lobby with ESRI to include new reference systems into software. Howard said NGS is talking to some software companies. Howard also said that if NGS doesn't do low-distortion, Task Force will also have to approach ESRI with this. This is an opportunity for task force to work with ESRI (and others) to make sure transformation is implemented in software properly. Task force will meet in conjunction with WLIA and WSL events through January 2020.

Discussion Topic #5: PLSS Forum (See page twelve for handout) (Veregin), aka 'This Land is Your Land Forum' in Darlington to educate people on its importance. Focus on basics of what PLSS is. Target audience are decision makers (exp. County board members. April 18th. Included field trip to PLSS monument. Final report for "Meet Me at the Corner" event available at SCO website.

Organization Reports

Association of Assessing Officers (WAAO)

- Did not attend.

Association of Public-Safety Communication Officials (WI-APCO)

- Did not attend.

County Surveyors Association (WCSA) – Presented by Bryan Meyer, President

County Surveyor Status: The current status of County Surveyors in Wisconsin is as follows: There are 61 County Surveyors in Wisconsin – 34 serving on a full time basis, 27 serving on a part-time basis. 11 counties choose to function without a County Surveyor. Four Counties still elect their County Surveyor Iowa, Portage, Sauk and Vilas.

PLSS Forum: For the 4th consecutive year, WCSA's partnership with the State Cartographer's Office and the PLSS Workgroup allowed us to hold a Public Land Survey System forum on April 25, 2018 at the Grand Lodge Waterpark Resort in Rothschild Wisconsin. This free event was titled "***Meet me at the Corner***" and was attended by 80 guests. This year the emphasis was on PLSS corner maintenance. The event featured a "field trip" few blocks away to visit the area of a buried stone PLSS corner marker. The event was well received and very much appreciated by those in attendance. Two of those guests were County Surveyors from Minnesota. They were impressed by the event and held a "***Meet me at the Corner***" event in Duluth, Minnesota last fall. The next Wisconsin PLSS Forum is titled "This Land is Your Land" and scheduled for April 18, 2019 in Darlington Wisconsin.

AE7: The surveying profession has administrative rules governing minimum standards for property surveys. This document was updated in July of 2016 and has created some friction and concern among land surveyors. WCSA was asked to contribute our thoughts and suggestions in areas of the document pertaining to PLSS corners. The Survey Section of the Department of Professional Services reviewed the collective feedback from the entire surveying community on January 10, 2019 and will is currently working to create a new revised version of AE7 in the future.

Meetings: In addition to an annual membership meeting in January, the WCSA board of directors meets 4 times a year in Neillsville. While these quarterly meetings technically constitute a Board of Directors meeting, we have anywhere between 20 and 35 people attend.

There are educational segments with representatives from The Wisconsin Department of Transportation (Mick Heberlein), The State Cartographer's Office (Brenda Hemstead) and the National Geodetic Survey (John Ellingson) in attendance. We are seeing not only surveyors, but many others from the land information community (GIS Mappers, property listers, vendors, etc.).

NATRF 2022: WCSA along with the entire surveying community will be impacted the North American Terrestrial Reference Frame 2022. NATRF is a coordinate system that better conforms to a global framework. Corey Hughes, Assistant County Surveyor for La Crosse County was the WCSA representative on the initial Discovery Team and now serves on the Education and Outreach Committee.

State Boundary Concern: *(See pages 13-14 for flyer)* The exact location of Wisconsin's western state boundary is uncertain. It lies within the shorelines of the Mississippi and St. Croix Rivers, but neither Wisconsin nor Minnesota can accurately point to an exact location of that line. Locating this line is important for four main reasons:

EMERGENCIES - Emergencies frequently take place on rivers. 911 dispatchers need to know immediately which municipal emergency response unit(s) to dispatch to those emergencies. Seconds count in emergency situations and uncertainty can cause unnecessary delays and possibly result in loss of life.

REGULATIONS - Boating, fishing and hunting regulations require adherence and enforcement. Both citizens and those responsible for administering regulations have a genuine need to know an exact location for the State line to enforce applicable laws.

CONSTRUCTION - Bridge projects take place to connect states. An accurate state line location is necessary to determine how many federal dollars each state would receive for these projects and to apply prevailing wage rates.

OFFICIAL RECORDS - Should a tragedy take place on the river, a death certificate would need to be filed. Knowing the location of the state line will determine which Coroner would be called to investigate the death and file the death certificate.

Our attempt to remedy the situation is to create a boundary line agreement for a line that is workable for both states. We are in the early stages of this effort and we realize there is much work to be done to accomplish a final line.

County Treasurers Association (WCTA)

- Did not attend.

Department of Administration - Division of Intergovernmental Relations (DIR) – Presented by Jim Giglierano, Geographic Information Officer

- On V5 of parcel layer, feedback is good.
- Just received County Land Info plans, State Plans are coming.
- First time coverage for LiDAR data for state complete. *(See pages 15-18 for handout)* Now in process of cleaning up and getting older data sets done also.
- Federal goal to finish LiDAR coverage through 3Dep program by 2023. DOA wants to connect eligible counties via funding.
- This year DOA needs to do state LiDAR plan through next few years.
- Participated in follow-on elevation study for nation. Now curiosity with bathymetry data. DOA looking for use cases of bathymetry data.

- Small grant from NOAA for coastal cities to map culverts. Will see how derivative products can be made with all stakeholders doing culvert work in different ways. Get stakeholders on same page.
- Webinar March 6, LiDAR Loma.
- Planning to store all LiDAR data for state in WisconsinView. About half done. Lots of new data coming, Veregin asks how LiDAR data will be handled with 2022 reference system.
- County plan formatting now more consistent (reported by Derringer).

Department of Transportation (DOT) – Presented by Keif S. Callaway, Bureau Plat Coordinator
Wisconsin Height Modernization Program (HMP) Updates: The WISCORS user fee (System Maintenance fee) has been submitted to the Legislative Review Council (Admin Rule Clearing House) for review. We will continue to provide updates as they become available. If you have further questions regarding the proposed WISCORS user fee, please contact WISCORSUserFee@dot.wi.gov.

Diane Arendt, former WisDOT representative for WCSA, transferred to another position within WisDOT (North Central Region – Rhinelander) in December 2018. Mick Heberlein, State Geodetic Coordinator, will assume Diane's duties as the WisDOT representative for WCSA. Mick can be reached at 608-243-5994.

WISCORS (Wisconsin Continuously Operating Reference Station) Network:

Contact Info: wiscors@dot.wi.gov

- 86 stations are operating within the WISCORS Network in Wisconsin (Beloit added in 2018). Thirteen (13) MnCORS stations operating along with Minnesota-Wisconsin border have been incorporated into the WISCORS Network.
- Testing is ongoing for previously constructed WISCORS stations (Dekorra, Reedsburg, Mauston, Oxford, De Pere and Rochester), to be incorporated in 2019.
- Testing is ongoing regarding Michigan DOT and Iowa DOT CORS stations along the respective borders before they can be incorporated into the WISCORS Network.

Wisconsin Geodetic Survey Control Network:

Contact Info: 1-866-568-2852 or geodetic@dot.wi.gov

- Phase 8D and 8E bench mark elevations and GPS station horizontal components have been published.
- Due to the exposed deficiencies in the current geoid model in the Phase 8D and 8E areas, the elevations have not been published on GPS station data sheets (unless they were on a level line). These elevations will be published once a new geoid model is developed and made available by NGS.
- In January 2018, NGS released a GPS on Bench Marks Prioritized List to support GEOID18 and Transformation Tool Development. Three bench marks needing additional data from Wisconsin were included on the list.
- HMP staff prioritized multiple project areas (Ft. McCoy – Rockland and Manitowoc – Two Rivers) to collect additional data on the three bench marks. Field activities for each project included geodetic leveling and GNSS observations. Each project has been loaded by NGS.
- Constructed 9 replacement passive monuments in 2018.

Bureau Plat Coordinator:

Keif Callaway replaces Rod Key (who retired last year) as the Bureau Plat Coordinator. Keif may be reached at 608-243-3397.

Break 2p-2:15p

Land Information Association (WLIA) – Presented by Eric Damkot, Past-President

- WLIA held its annual conference last month in Appleton. At that conference we passed the presidential baton to Peter Strand and announced Tony Van Der Wielen as our president elect. We also welcomed 5 new first-time board members. We'll hold our organization retreat next week so our plans for the next year are still a work in progress.
- We've tried to be proactive in our coordination with many of the groups in the room. WSLs, WRDA, WRPLA and SCO are frequent exhibitors at our annual conference and we try to reciprocate when possible. I had the opportunity to present to WLTA last fall. Our Spring regional meeting in Eau Claire this May is a joint event with WRPLA and we are working toward a joint event with WRDA in spring 2020. We are also in discussion for an extended presentation at the 2019 Municipal Assessor's institute this fall. We are always looking for more opportunities for collaboration so please contact any of us, Ann Barrett or Pat Walker if you have ideas.
- At this time we are not actively pursuing any new legislation. Making sure there is funding for the spatial data needs related to NG911 is the area we are probably watching the closest. Keeping an eye out for any proposal that could impact the WLIP is always on our list.
- Last year our technical committee updated the status of foundational layers document and created a new foundational layers completeness discoverability accessibility scorecard. The scorecard does not attempt to rank the relative importance of each foundational layer, but gives each a letter grade. It is our hope that by repeating this process on an annual basis it will help track progress toward statewide completeness and the identified deficiencies that can be used to help justify additional funding when opportunities present themselves. If you've not previously looked at these documents I'd invite you to do so and welcome your feedback.
- In late 2018 WLIA adopted data exchange standards for both address points and street centerlines. The goal of the standards are to help develop best practices and simplify the exchange and aggregation of data from multiple producers. The NENA standard was referenced in the creation of the WLIA standards and we anticipate the data needs of NG911 to be one application that will benefit by the establishment of this standard. We conducted a survey last summer and sent the invitation to participate to all of the groups represented today. We appreciate the feedback we received. At this time we are looking for groups to help us promote the use of this voluntary data exchange format. LION has already gone on record in support.
- 2019 regional meetings are May 30-31 in Eau Claire and Oct 24-25 in Bayfield. The 2020 annual conference will be February 19-21 at the Marriott Madison West.

Land Information Council (WLIC) – Presented by Adam Derringer, Chair

- Program plan document progressing - will help LIOs interact w/DOA to get SIG grants.
- Parcel fabric top priority, while PLSS remonumentation is also a priority. LiDAR and imagery are other core WLIP layers. WLIC pushing for standards for all four layers.
- Pushing for open data access and standards. DOA sharing data received in its programs to RML or WisconsinView.
- NG911 is also area of interest, especially with the proposal to move operations to DOT.
- Waiting for appointments to enable WLIC to move forward.
- Following NGS 2022 issues also.

Land Information Officers Network (LION) – Presented by Lauree Aulik

- LION has accepted WLIA recent technical standards.
- Watching budget to see if any there is any WLIP impact, but not seeing any.
- Participating in NGS 2022 taskforce.
- Next meeting is at WLIA Spring Regional.
- Zach Newton (Waushara County), LION Chair-Elect.
- 2018 County Land Information Plans are now online.
- Reporting of county fees due June 30, 2019.
- Special Initiative Grants projected to go down to \$40,000/year from \$50,000/year.

Land Title Association (WLTA) – Presented by Sarah Hedtke and Jonathan Sayas

- **Remote Online Notary (RON):** RON is a national issue with 10 states currently having enacted RON laws and another 20 or so considering (follow this link for the most up to date maps: <https://www.mba.org/audience/state-legislative-and-regulatory-resource-center/remote-online-notarization>). Our lobbying efforts will focus on Wisconsin's RON bill, which has been drafted by the Legislative Reference Bureau. RON will significantly affect residential real estate closings and we need to have a bill in Wisconsin which reflects the needs of our industry.
- **Private Road Maintenance Agreements:** For landlocked real property where access is via a private drive or street, FNMA lending guidelines require one of the following: (i) an enforceable maintenance agreement, (ii) state statutory provisions defining the responsibilities of property owners for the maintenance and repair of a private street, or (iii) an indemnity for loss executed by the originating lender (FNMA guidelines here: <https://www.fanniemae.com/content/guide/selling/index.html>). This has presented a hurdle for real estate transactions in Wisconsin where no enforceable maintenance agreement exists of record. WLTA is proposing a legislative fix to address the FNMA guidelines, by creating a statutory default for responsibilities of property owners when no agreement exists.

Real Property Listers Association (WRPLA) – Presented by Kimberly Christman, President & Brannick Beatse, President-Elect

- Our joint meeting with WLIA at the Spring Regional in Eau Claire. Details about the meeting: Lismore Hotel May 30th-31st, 2019, we are hoping to have content that will showcase the overlapping of the WRPLA & WLIA.
- We are interested in cleaning up the annexation statutes to allow for everyone to have the review process with the state. Also to clarify what needs to be recorded and why this is important to accurate land records across the state.
- We are interested in cleaning up and clarifying some of the language in §706.085 regarding Correction Instruments.
 - a. Use of the word “parcel” or “divisible parcel” – most in our organization have interpreted this to be any piece of land; however, we have received arguments that this excludes pieces of land that would be in violation of local zoning ordinances.
 - b. The statute is a little open ended about what can be corrected about a name. Some in our organization have received correction instruments intending to change a name to a completely different name.

- Corporate Merger/Name Change – we have received conflicting information from the DOR over the years regarding how we are supposed to handle this issue. Do we need a deed recorded to reflect the name change or not?

Realtors Association

- Did not attend.

Register of Deeds Association (WRDA)

- Did not attend.

Society of Land Surveyors (WSLS) – Presented by Terry L. Van Hout, President-Elect

- **Utility Locate Issues:** The WSLS is leading the charge with Utility Locating issues. Getting the utilities located has been an issue for a long time but lately seems to be worse than ever. This is costing a lot of money and time for project that could have been averted if only located correct when requested. Kevin Boyer is collecting information from surveyors for issues of no markings by the time line and sending a report to Diggers Hotline. Digger Hotline has now added a "No Show" ticket so you can report if a particular locator did not show up to mark lines in the time permitted or to a meeting request. Please understand that Diggers Hotline is not the issue and they have been very supportive of our efforts. The issue is with some of the locating companies. We are making headway and getting other organizations involved including the Wis DOT.
- **Administrative Rule A-E 7:** We had a redraft a few years ago but with complaints across the state from surveyors, a group led by Tony Gromacki went around the state and receive input. One of the main issues was the language of "showing all encroachments" has been change to "showing observed encroachments". With the different types and sizes of survey done through the state, surveyors in the rural and wooded areas felt it would cause undue cost to their clients to show all encroachments. There were many other less contentious items were also addressed. There is a public meeting being held on April 4th.
- **703 Condominiums:** Register of Deed Association reached out to the WSLS to help with survey items in 703 Condominiums. We had a group that addressed their proposed language and we were able to teach and explain some of the existing language. The Register of Deeds Association also invited us to meet with a multiple organization group including the Wisconsin Bar Association, Wisconsin Land Title Association, Wisconsin Realtors Association and the Wisconsin Counties Association to discuss the proposed language. The Register of Deeds Association is working on edits and the bill should be proposed soon.
- **Committees:** The WSLS Waters Issue Committee and Plat Review Committee have been rolled into the Government Affairs Committee. Most items for the committees were also covered by Government Affairs.

State Agency Geospatial Information Committee (SAGIC) – Presented by Colter J. Sikora, Chair

- SAGIC represents 21 state and partner agencies representing much of GIS within Wisconsin state government. 21 voting members and over a dozen other active members work to improve the effectiveness and efficiency of state agencies through collaboration using geospatial technologies.
- Currently responding to the WLIA's Address and Road Centerline Standard.

- In the process of renewing ESRI's Master Purchase Agreement (MPA), which affects most governmental units using and purchasing GIS software in Wisconsin. In preparation for 2020, SAGIC will work with DOA and ESRI to adopt ESRI's more current MPA template.
- Still working towards deploying an open data tool for state agencies and other to have easy access to state agency geospatial data. Anticipating that in 2019 individual agencies will be encouraged to publish and release their data as they are ready, rather than to have a bunch of agencies open their sites at one time.
- Considering holding an event at the State Capitol to share their work and abilities with Legislature, the Governor's Office, and agency executives to better demonstrate the services that GIS teams throughout state government provide.

State Cartographer's Office (SCO) – Presented by Colter J. Sikora, Chair

- AJ Wortley went to private sector. SCO hired Anna Wells as project staff to help with parcel project and LiDAR data.
- Other projects include: Projects of Special Merit w/DOA for statewide culvert layer. Hiring project staff for this.
- GeoData@Wisconsin, LiDAR (2-day LiDAR workshop – converting to ArcGIS Pro workshop).

WI Chapter of National Emergency Number Association (WI-NENA)

- Did not attend.

Summary of Action Items

- 1) Attendees were directed to send Colter Sikora (colter.sikora@wisconsin.gov) notes and meeting handouts for meeting minutes.
- 2) Membership preference for the next meeting leaned in favor of fall 2019, either in Wisconsin Dells or Madison.

Next Meeting

Next meeting will be tentatively in fall 2019, with a specific date and place to be determined.

Adjourn

Meeting adjourned at 3:28 p.m.



WISCONSIN'S GEOSPATIAL INFRASTRUCTURE GETS AN **UPGRADE**

The statewide parcel database will be augmented with Public Land Survey System (PLSS) data by the end of 2019 according to an agreement between the Wisconsin Department of Administration and UW-Madison's State Cartographer's Office. The agreement is part of the Statewide Parcel Map Project, a multi-year plan to make up-to-date, accurate statewide GIS parcel data freely available online.

Wisconsin's statewide parcel database contains about 3.5 million digital parcel polygons. Attributes include ownership information, property class, assessed value and property taxes. The database is updated annually by the State Cartographer's Office by aggregating parcel data supplied by Wisconsin's seventy-two counties.

PLSS is the foundation of nearly every property description in Wisconsin. Accurate PLSS data is essential to correctly map parcel boundaries. PLSS is responsible for the familiar rectangular pattern of townships, sections and quarter-sections that cover much of the United States. PLSS was first established in the early 1800s as an orderly way to partition federal lands and convey them to private ownership.

Adding PLSS to the statewide parcel database will offer numerous benefits. These include facilitating improvements in the accuracy of parcel polygons, helping reduce property disputes, reducing survey costs for private landowners, helping ensure equitable property taxation, and aiding in the resolution of apparent gaps and overlaps in county boundaries.

The importance of PLSS is widely recognized within Wisconsin's geospatial communities. The Wisconsin Land Information Association has stated that investing in PLSS infrastructure will allow us to "more accurately map land holdings throughout our state." The Wisconsin County Surveyors Association has argued that "we should use PLSS data to solidify our statewide parcel map."

The statewide PLSS database will be derived from accurate county coordinate data where available. The Survey Control Finder web application developed by the State Cartographer's Office is the current access point for much of the state's county PLSS data. Experience with this application and the data underlying it will be used as a starting point to complete the statewide PLSS database.



ORIGINAL PLSS SURVEY

General Land Office map of Township 8 North, Range 1 West, in Grant County. The survey that produced this map was conducted in 1833. PLSS township, section and quarter-section lines are visible on the map.

Source: Board of Commissioners of Public Lands & University of Wisconsin Digital Collections
<http://digital.library.wisc.edu/SurveyNotes>



MODERN PLSS DATA

Depiction of the same township in the Survey Control Finder app developed by the State Cartographer's Office. Corner locations for townships, sections and quarter-sections are based on accurate county coordinates where available.

<https://maps.sco.wisc.edu/surveycontrolfinder>



STATEWIDE PARCELS

Current parcel boundaries in the same township, as shown in the Statewide Parcel map viewer developed by the State Cartographer's Office. Parcel boundaries reflect the rectangular geometry of the original PLSS survey. Most property lines are controlled by the original placement of PLSS corners.

<https://maps.sco.wisc.edu/Parcels>

Task Force Goals and Creation of Focus Groups

Jan. 2019



WSRS2022
Wisconsin Spatial
Reference System
2022 Task Force

Background

In 2022 the National Geodetic Survey (NGS) will replace NAD 83 and NAVD 88 with new horizontal and vertical reference systems known as the North American Terrestrial Reference Frame of 2022 (NATRF2022) and the North American-Pacific Geopotential Datum of 2022 (NAPGD2022).

These changes will have significant effects on surveying, mapping and GIS across Wisconsin. To respond to these changes, the Wisconsin Spatial Reference System 2022 Task Force (WSRS2022) has been organized under the Wisconsin Society of Land Surveyors (WSLS). The Chair and co-Chair of the Task Force are Howard Veregin, Wisconsin State Cartographer, and Richard Kleinmann, chair of the WSLS Geospatial Committee.

Goals and Mission

The mission of WSRS2022 is to help ensure successful implementation of the new reference systems across Wisconsin.

WSRS2022 represents a broad coalition of geospatial and surveying professionals in Wisconsin, including federal, state, regional, county and local governments, as well as agencies, corporations and associations involved in the production and use of geospatial data.

Activities

A Discovery Team meeting was held in Madison in August, 2018, to facilitate the creation of the Task Force and to decide how to respond to a Federal Register Notice about the proposed NGS process to update the State Plane Coordinate System.

Starting in December, 2018, the Task Force initiated five Focus Groups to concentrate on specific aspects of the new reference systems. (See panel to the right). It is expected that these Focus Groups will be formed by late February, 2019.

Focus Groups

Technical Focus Group

Goals: Develop a proposal — to be submitted to NGS — that details the state's proposed response to the introduction of the new reference systems. Consider all three tiers of Wisconsin's spatial reference system structure: county coordinate systems; state plane zones; and a single statewide system. Also consider the impacts of the new vertical datum.

Legislative Focus Group

Goals: Define the impacts of the new reference systems on state and local legislation and ordinances. Make specific recommendations for updating legislation and ordinances. Develop a timeline to fit legislative calendars.

Education and Outreach Focus Group

Goals: Help educate the community about the new reference systems and their implications for geospatial data and workflows. Target audience includes software vendors and developers, surveyors, utilities, GIS practitioners, educators, and students.

Software/Hardware Focus Group

Goals: Develop plans to incorporate the new reference systems into hardware and software in a timely and accurate manner. Work with NGS to incorporate these coordinate systems into publications and transformation software.

Implementation/Adoption Focus Group

Goals: Identify implementation and adoption implications of the new reference systems, including best practices for transforming current data, effects of state and federal agency plans and requirements, and funding of local/state data conversion.



For more information visit
www.sco.wisc.edu/community/wsrs2022

THIS LAND IS YOUR LAND

THE LEGACY OF THE PUBLIC LAND SURVEY SYSTEM IN WISCONSIN



Photo by Corey Coyle, commons.wikimedia.org/wiki/File:Vermont_Township_Farm_-_panoramio.jpg

9:00-9:10 am	Introduction/Overview
9:10-10:00 am	The Public Land Survey System: A Dependable Network for Land Ownership (Bryan Meyer, La Crosse County Surveyor)
10:00-10:30 am	Role of the County Surveyor (Doug Avoles & Laurence Johns, Vernon County)
10:30-10:45 am	Break
10:45-11:15 am	Breakout Session: Research Methods (Dan Frick, Dane County Surveyor)
11:15 am-12:00 pm	Field Trip: Walk to PLSS Corner
12:00-12:45 pm	Lunch (included) <i>Sponsored by WSLs & WCSA</i>
12:45-1:00 pm	Results from Field Trip
1:00-1:30 pm	Boundaries and Easements (Larry Austin, Professional Land Surveyor & Engineer/ Retired Professor, UW Platteville)
1:30-1:45 pm	Break
1:45-2:30 pm	Property Surveys and Legal Descriptions (Bryan Meyer, La Crosse County Surveyor & Brannick Beatse, RPL)
2:30-3:00 pm	Q&A Panel (all speakers)

**FREE AND OPEN
TO THE PUBLIC!**

**LAFAYETTE COUNTY
MULTIPURPOSE
BUILDING**

**11974 AMES RD.
DARLINGTON, WI**

APRIL 18, 2019

PLSS WORK GROUP



www.sco.wisc.edu/community/PLSS-Work-Group

Register online at
TRAINING.SCO.WISC.EDU/PLSS-SURVEY-FORUM

WISCONSIN HAS A “LOST” WESTERN BOUNDARY!

The exact location of our western boundary with Minnesota is uncertain. It lies somewhere within the shorelines of the Mississippi and St. Croix Rivers, but neither state knows exactly where.

WHY IS THIS A PROBLEM?



Emergencies occur frequently on rivers. Dispatchers need to know which municipal emergency response units to contact. Seconds count! Uncertainty can cause delays and even loss of life.

Regulations for boating, fishing and hunting differ between these two states. Citizens and enforcement agencies need to know the exact location of the state boundary to apply regulations fairly.

Infrastructure like roads and bridges connects the two states. An accurate state boundary is needed to determine how much federal funding each state will receive, how to apply prevailing wage rates for construction, and who is responsible for maintenance.

Ownership disputes can occur if both states claim the same piece of land. This situation has implications for property taxation, law enforcement, and building and environmental regulations.

Our western boundary with Minnesota can be accurately defined. Information is available to solve this problem. Working together, we can find the line again!

WHY IS THERE UNCERTAINTY IN THE LOCATION OF OUR WESTERN BOUNDARY WITH MINNESOTA?

Wisconsin became the 30th state admitted to the Union on May 29, 1848, establishing the majority of its western boundary as the main channels of the St. Croix and Mississippi Rivers.

Minnesota became the 32nd state admitted to the Union on May 11, 1858, establishing as one of its eastern boundaries the main channels of the Mississippi and St. Croix Rivers.

While the common state line between Wisconsin and Minnesota was established by the constitutions of each state, it was never accurately surveyed. The original government surveyors (1832-1866) made no attempt to determine an accurate location for the main channel of either river, nor was that ever a part of their task.

The main channels of the Mississippi and St. Croix Rivers have been altered dramatically by human activity over the past 170+ years. Finding the main channel of either river as it existed at statehood in 1848 or 1858 is not possible.



WHAT CAN BE DONE?

Boundary Line Agreement. Establishing a fixed Wisconsin-Minnesota boundary line can be accomplished with a boundary line agreement. The first step is to determine the location of the centerline of the main channels of the Mississippi and St. Croix Rivers today, using modern surveying methods. Following a review and negotiation period, an agreement for the updated state line would be submitted by each state legislature to Congress for approval.

Involvement. In order to accomplish this goal, a coordinated effort will be needed from the following partners: the Attorney General's Office; the State Cartographer's Office; the State Geographic Information Office; the Department of Transportation; the Department of Natural Resources; the Wisconsin County Surveyors Association; the Wisconsin Society of Land Surveyors; the United States Fish and Wildlife service; United States Army Corps of Engineers; others.

Timeframe. There will be challenges involved in this initiative, but a resolution is well worth the effort. Wisconsin citizens will be celebrating their terquasquicentennial anniversary (175 years) in 2023. We should strive to resolve the state boundary issue by the end of 2023.

CONTACT US!

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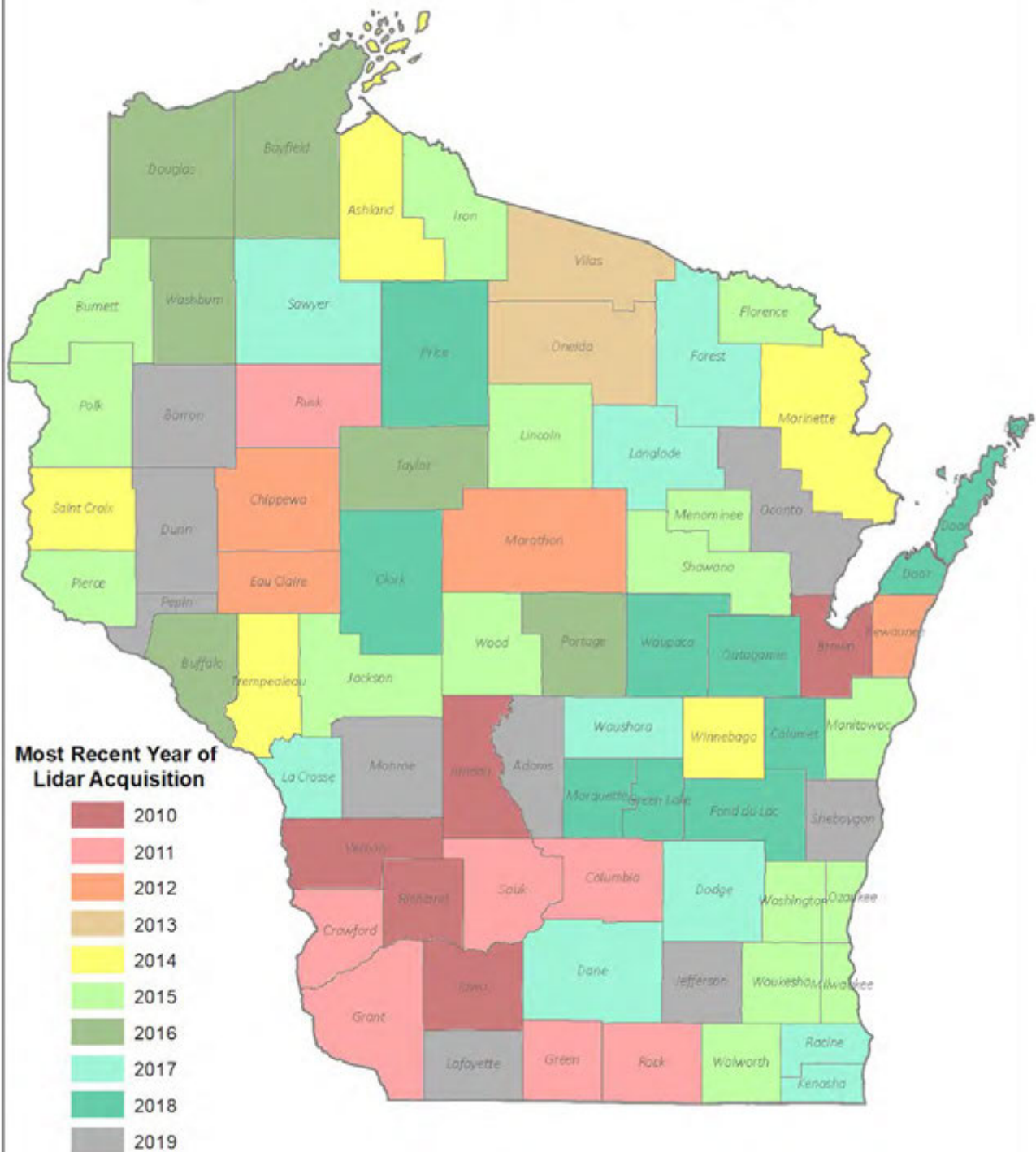
Brenda Hemstead
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Wisconsin County
Surveyors Association



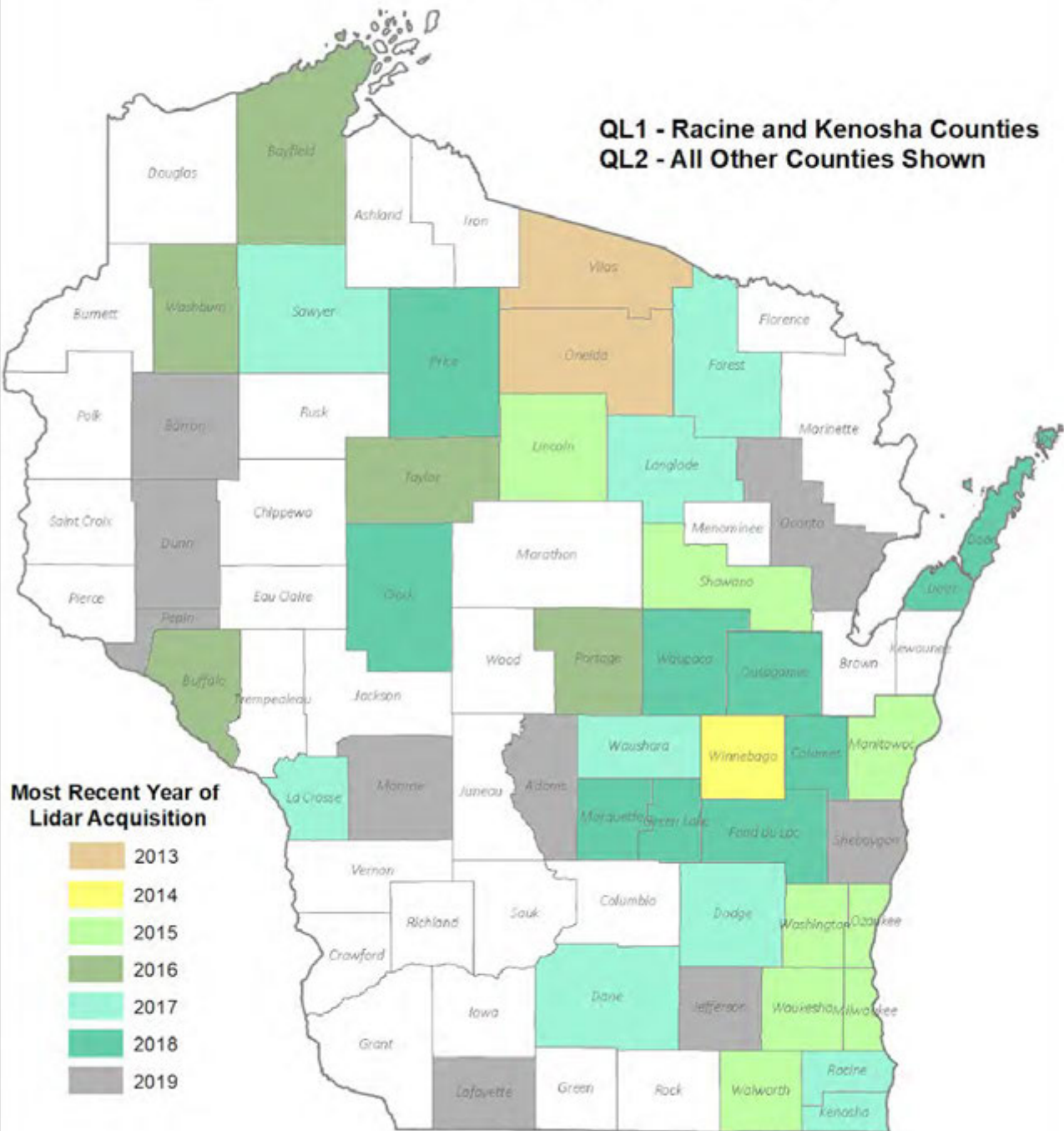
Let's work together to resolve this issue!

Wisconsin Lidar Status Feb. 2019

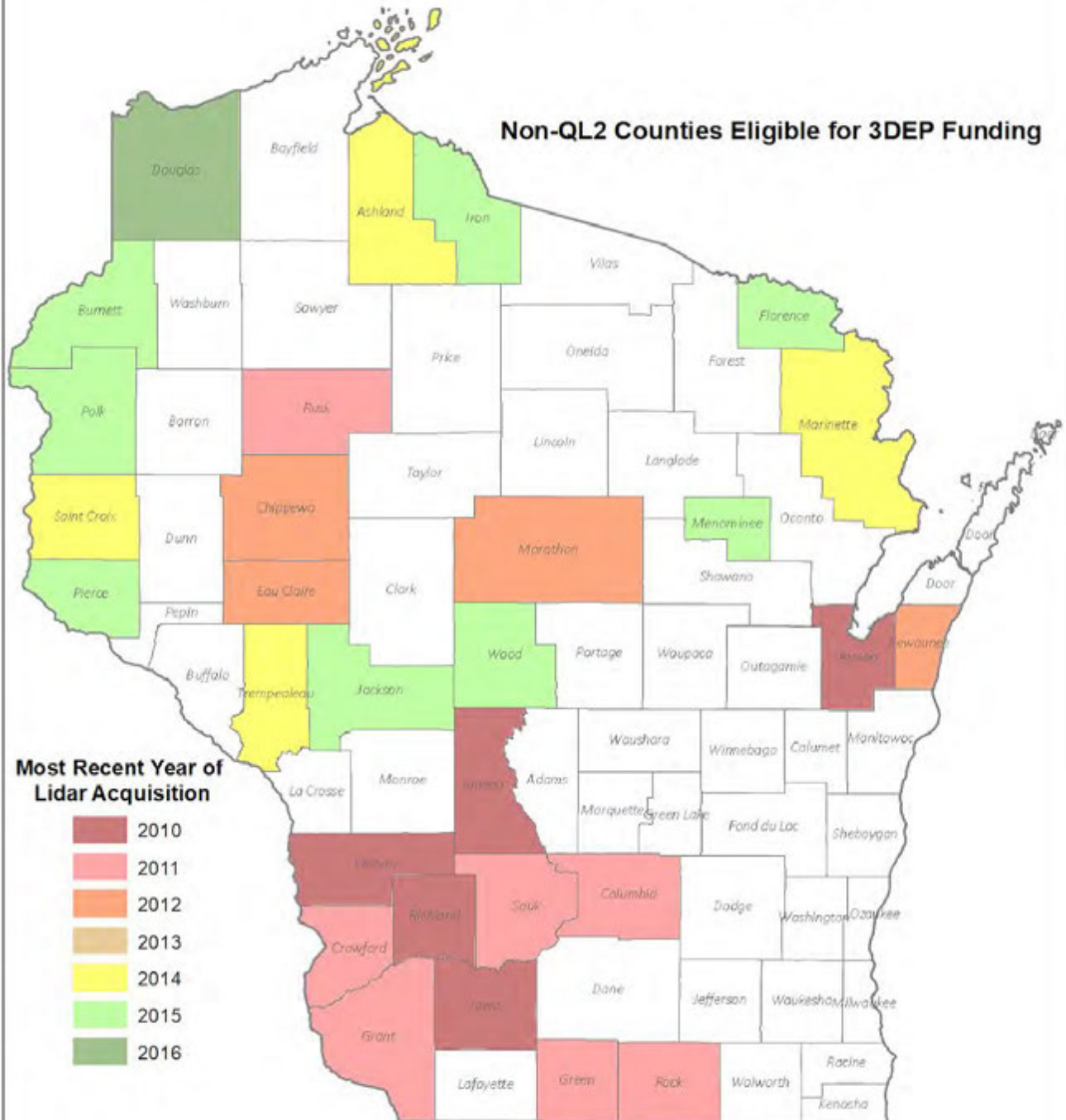


Wisconsin Lidar Status Feb. 2019

QL1 - Racine and Kenosha Counties
QL2 - All Other Counties Shown



Wisconsin Lidar Status Feb. 2019



LIDAR Links

USGS 3D Elevation Program (3DEP) Home page

<https://www.usgs.gov/core-science-systems/ngp/3dep>

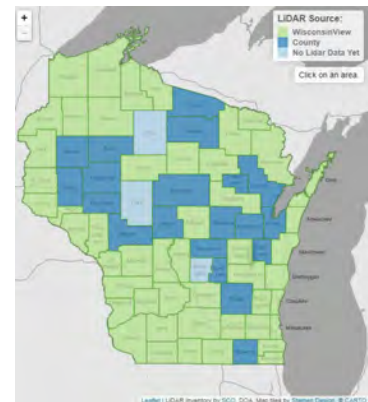
WI State Cartographer's Office Elevation Page

<https://www.sco.wisc.edu/data/elevationlidar/>

Green = lidar in WisconsinView

Blue = no lidar data currently in WV (some county links)

Light blue = no lidar data yet



WisconsinView FTP Download Service

<ftp://ftp.ssec.wisc.edu/pub/wisconsinview/lidar/>

WisconsinView HTTP Download Service

<http://bin.ssec.wisc.edu/pub/wisconsinview/lidar/>

Wisconsin DNR Open Data Page - Elevation

<https://data-wi-dnr.opendata.arcgis.com/datasets?q=elevation>

Wisconsin DNR Elevation REST Services

https://dnrm.wisconsin.gov/arcgis_image/rest/services/DW_Elevation



ArcMAP layer file with DNR REST services

http://bin.ssec.wisc.edu/pub/wisconsinview/lidar/00_Rest_Services/DNR_Lidar_Service020719.lyr