



FINAL REPORT

**A DAY WITH YOUR
COUNTY SURVEYOR**

**APRIL 3, 2017
CHULA VISTA RESORT
WISCONSIN DELLS, WI**

Overview

In early 2017 the State Cartographer's Office (SCO) received a special Statewide Outreach Incentive Grant from the UW-Madison Office of University Relations to host a one-day forum entitled, "A Day with Your County Surveyor." This event was held at the Chula Vista Conference Center on April 3, 2017. The forum was free to all attendees.

Funding for the 2017 forum was also provided by the Wisconsin Society of Land Surveyors (WSLS) who sponsored lunch for all participants. The SCO covered the remaining costs for the forum.

The forum was a sequel to two earlier forums, one in 2015 (in Stevens Point) and one in 2016 (in Eau Claire), also supported through Statewide Outreach Grants. The overall goal of these forums was to facilitate dialog about how to align surveying and parcel mapping activities in the state to improve accuracy and reliability. The 2017 forum focused specifically on the PLSS corner maintenance process and included a field trip to an original PLSS corner under the guidance of the Adams County Surveyor.



PLSS Work Group

The PLSS Work Group was formed by individuals and organizations in Wisconsin to advocate and advance the purpose and importance of the Public Land Survey System. The goal of the Work Group is to educate and encourage state, county and municipal agencies in improving, advancing and maintaining the PLSS statewide.

The need for a PLSS Work Group was identified at the 2016 forum in Eau Claire. The Work Group was formed shortly thereafter.

The PLSS Work Group helped organize and facilitate the 2017 forum in Wisconsin Dells. The group has also developed a position statement and published several articles in the Wisconsin Counties Association (WCA) magazine.

Current membership of the PLSS Work Group is as follows:

State Cartographer's Office

Howard Veregin, State Cartographer
Brenda Hemstead, Data Services

Wisconsin County Surveyors Association

Bryan Meyer, President & La Crosse County Surveyor

Wisconsin Society of Land Surveyors

Jeff DeMuth, Professional Land Surveyor
Steve Geiger, Polk County Surveyor

Jodi Helgeson, Adams County Register of Deeds

Eric Damkot, GIS Division IS Manager, Washington County

Jason Poser, Buffalo County Land Records Coordinator/Land Information Officer

Mitch Moline, Wisconsin Dept. of Transportation

Chris Colney, GIS Specialist, Grant County

For more information see

<http://www.sco.wisc.edu/community/plss-work-group.html>

Forum Objectives

The Public Land Survey System serves as the cornerstone of all property descriptions in the Wisconsin. The system was established in the 18th century to facilitate land conveyance from the federal government. Original land patents were granted with descriptions based on this system. Maintaining PLSS corner monuments is necessary to accurately depict land ownership and interest in real property.

Without a properly maintained network of PLSS corner monuments, there is an increased risk of property disputes, inequitable taxation, disagreements about resource rights, confusion over easement locations, and unnecessary expenditures by private citizens and local governments.

Maintenance and perpetuation of the monuments marking the original surveyed locations of PLSS corners is essential to ensure the integrity of the system. However, across the state, thousands of monuments need to be re-established and modern geodetic coordinates need to be obtained for them. The high cost of this effort is an impediment to its eventual completion.

The specific goals of “A Day with Your County Surveyor” were:

- To explain the role of the County Surveyor in maintaining the PLSS network, including initial research, field work and tie sheet creation; and
- To describe how newly re-established PLSS corners are brought into a county’s digital parcel fabric to improve parcel map accuracy and ultimately save the county time and money.



The Role of the University

Outreach and community engagement are ways to guide the development of geospatial policy and practice in Wisconsin. By engaging stakeholders, we can develop a common vision for the state and facilitate the adoption of this vision as a model for the future.

The forum embodies the Wisconsin Idea by linking UW expertise and resources to issues that impact Wisconsin’s citizens. Improved parcel data is needed as the state moves forward with its efforts to transition to the next generation of online information and services for citizens. Through projects like the forum, the University of Wisconsin can continue to be a leader in the effort to improve the efficiency and effectiveness of these services.

The topics addressed by the forum are of special importance due to legislation requiring the creation and maintenance of a statewide parcel database. The statewide parcel database is being assembled by the State Cartographer’s Office under the direction of the Department of Administration, and with the cooperation of all seventy-two of Wisconsin’s counties. The first and second versions of the database are online and the third version is currently under development in spring, 2017. This effort has provided a way for Wisconsin to make advances in its geospatial infrastructure and at the same time provide a model of cooperation between the University of Wisconsin, state agencies, and local governments in all corners of the state.

Audience

The groups identified as stakeholders in this discussion included county surveyors (who maintain the PLSS network), GIS/geospatial professionals (who perform parcel mapping using PLSS information), county officials such as Registers of Deeds and Real Property Listers whose work utilizes or depends on accurate parcel descriptions, County Supervisors who determine funding levels for county PLSS maintenance, state agency personnel who make use of data derived from counties, as well as educators, students, and the general public.

Information on the Forum was published on the SCO website: <http://www.sco.wisc.edu/community/plss-work-group.html>

The Forum was also advertised on a variety of email distribution lists by the SCO (see Table 1). Overall, several thousand individuals in the state were informed about the forum.



List	Audience
UW-Madison Geospatial Alliance	Several hundred GIS faculty, staff, and students at UW-Madison and other UW institutions
County Land Information Officers Network (LION)	Over one hundred county Land Information Officers and their designees
Wisconsin County Surveyors Association (WCSA)	All designated County Surveyors in the state
Wisconsin Society of Land Surveyors (WSLS)	Over a thousand professional private-sector surveyors in the state
Wisconsin Land Information Association (WLIA)	Over a thousand GIS/geospatial professionals in government, the private sector, non-profits, education, and elsewhere
Wisconsin Counties Association (WCA)	Online newsletter reaching all members of the Wisconsin Counties Association
State Cartographer's Office (SCO) social media	SCO weekly email distribution and Twitter account reaching several hundred subscribers
UW-Madison Geography Department	Several dozen faculty and staff with teaching and research interests in land information, historic landscapes, economic geography, Geographic Information Systems, etc.
2016 Forum registrants	Approximately one hundred people who attended the last forum
Geospatial faculty and staff at UW institutions	Several dozen faculty and staff at UW institutions around the state with an interest in Geographic Information Systems and mapping

Table 1. Email distribution lists used for forum advertising.

Marketing

The figures on this page show the front and back of the flyer that was produced to advertise the forum. This flyer was used in both hard-copy and electronic versions for print, email and website distribution.

Event sponsors, including the UW-Madison Office of University Relations and the Wisconsin Society of Land Surveyors, were acknowledged on all marketing material.

**THE PUBLIC LAND SURVEY SYSTEM
AFFECTS THE RIGHTS OF ALL
PROPERTY OWNERS IN WISCONSIN**
property taxation :: easement locations :: resource rights :: surveying costs

Discover how the Public Land Survey System affects your county

A DAY WITH YOUR COUNTY SURVEYOR
MONDAY, APRIL 3, 2017 FROM 9:00 AM TO 4:00 PM
CHULA VISTA RESORT, WISCONSIN DELLS
REGISTER AT TRAINING.SCO.WISC.EDU/PLSS-SURVEY-FORUM/
FREE AND OPEN TO THE PUBLIC

EVENT SPONSORS

THE PLSS WORK GROUP

WWW.SCO.WISC.EDU/COMMUNITY/PLSS-WORK-GROUP.HTML

A DAY WITH YOUR COUNTY SURVEYOR MONDAY, APRIL 3, 2017 FROM 9:00 AM TO 4:00 PM CHULA VISTA RESORT, WISCONSIN DELLS

The Public Land Survey System (PLSS) is the framework for property ownership in Wisconsin. Without a properly maintained network of PLSS corner monuments, there is an increased risk of property disputes, inequitable taxation, disagreements about resource rights, confusion over easement locations, and unnecessary expenditures by private citizens and local governments.

Join us for a free, day-long forum to discuss the need for an accurate, maintained, up-to-date network of PLSS corners in Wisconsin.

Agenda

9am-9:15am Introduction/Overview

9:15am-10am Bryan Meyer, La Crosse County Surveyor

Replacing PLSS corners requires a surveyor to be an historian, a detective, a forester, an archeologist, a soil scientist and a problem solver. Learn the types of information the professional surveyor researches for locating an original survey corner.

10am-12:30pm Field Trip to an original PLSS corner

Guided by the Greg Rhinehart, Adams County Surveyor, attendees will take a scenic half-mile walk into the woods along the Wisconsin River to locate an original PLSS

corner that was set over a hundred years ago. Along the way, the group will learn about the types of terrain, methods, and processes used for re-establishing a PLSS corner. Participants will also have an opportunity to use GPS equipment.

This field trip will happen rain or shine. Please dress accordingly, bring/wear comfortable clothes and shoes, and be prepared for what the weather holds.

12:30pm-1:30pm Lunch

Sponsored by the Wisconsin Society of Land Surveyors

1:30pm-2:00pm Steve Geiger, Polk County Surveyor

Learn how the professional surveyor records and creates tie sheets and what happens after field collection.

2:00pm-3:00pm Jason Poser, Buffalo County Land Records Coordinator/LIO; Mike Vander Sanden, Washington County GIS Coordinator; Greg Rhinehart, Adams County Surveyor; Jon Galloy, Adams County GIS Specialist; Kelly Felton, Sauk County LIO

This session will exhibit and describe how newly remonumented PLSS corners are brought into the county's digital parcel fabric, how the PLSS is used to improve parcel map accuracy, and how this effort can save the county money.

**REGISTER AT TRAINING.SCO.WISC.EDU/PLSS-SURVEY-FORUM/
FREE AND OPEN TO THE PUBLIC**



Attendees

The breakdown of forum attendees by sector and affiliation is shown in Tables 2 through 4. Attendance was quite diverse, and included County Supervisors, other elected county officials, professional surveyors, GIS/geospatial professionals, students, a variety of county and state agency personnel, and the general public.



Sector	
Assessor	3
County Board	4
County Treasurer	1
GIS/Geospatial professional	23
Professional surveyor	11
Realtor	1
Retired	3
Register of Deeds	4
Real Property Lister	8
Student	2
Other [see Table 3]	18
Unknown	5
TOTAL	83

Table 2. Forum registrants by sector.

Affiliation	
Association	2
City	1
County	43
Private company	14
State agency	14
UW	6
None	3
TOTAL	83

Table 3. Forum registrants by affiliation.

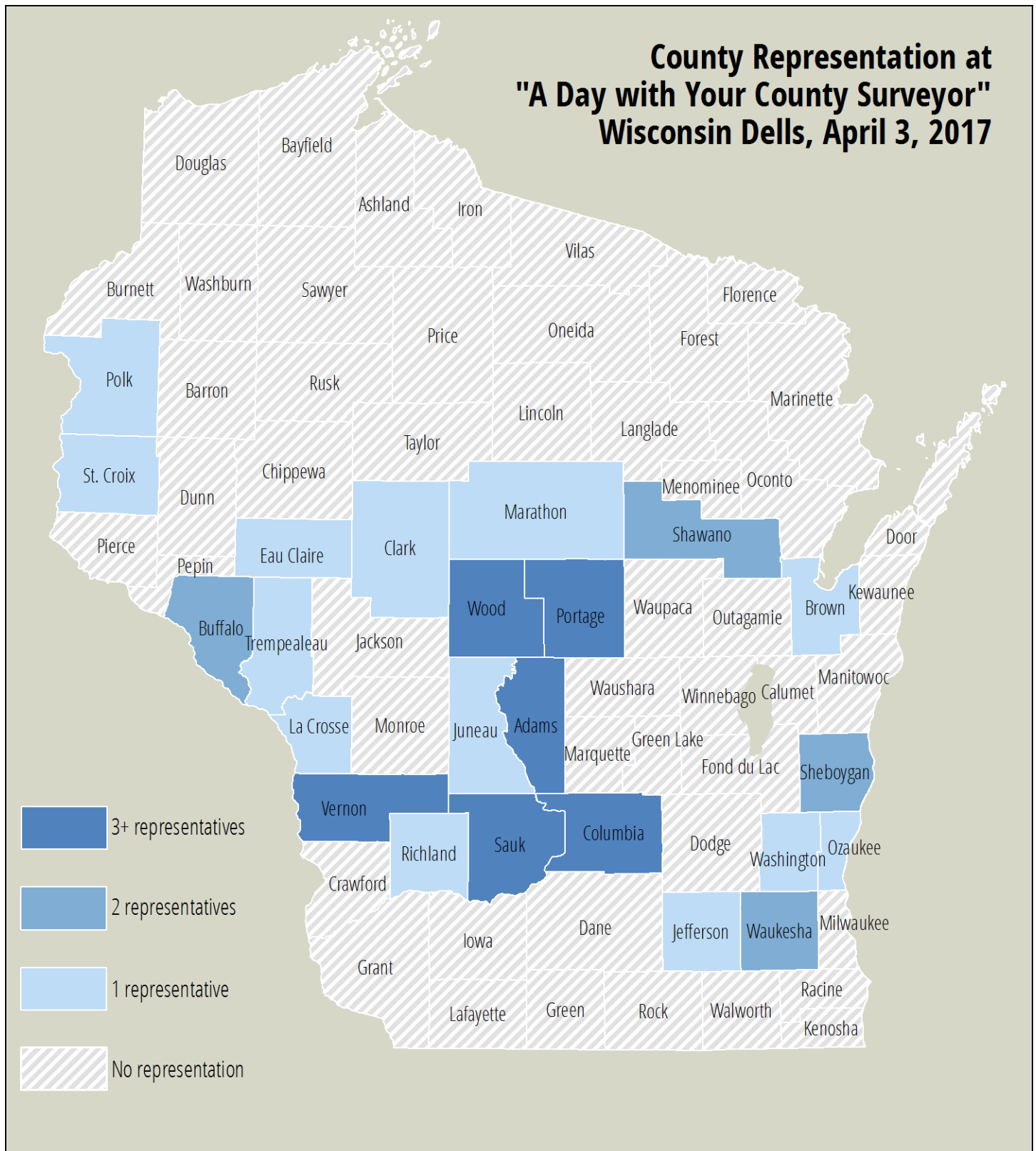
"Other" Job Titles	
Central Services Specialist (County)	1
Closing Officer (DNR)	1
Construction Superintendent (County)	1
County Conservationist	1
County Planner	1
Engineering Specialist (WisDOT)	2
Engineering Technician (City)	1
Geodesist (WisDOT)	1
Grant Administrator (DOA)	1
Land Description Technician (County)	2
LIS Analyst (County)	1
Parks and Rec Specialist (DNR)	1
Programmer Analyst (County)	1
Real Estate Specialist (DNR)	1
Transaction and Policy Specialist (DNR)	1
Water Quality Data Manager (DNR)	1

Table 4. Job title listing for "other" category in Table 2.

County Representation

The map below shows the number of county representatives at the 2017 forum. County representatives include County Supervisors, Registers of Deeds, Real Property Listers, Land Information Officers, GIS staff, and others.

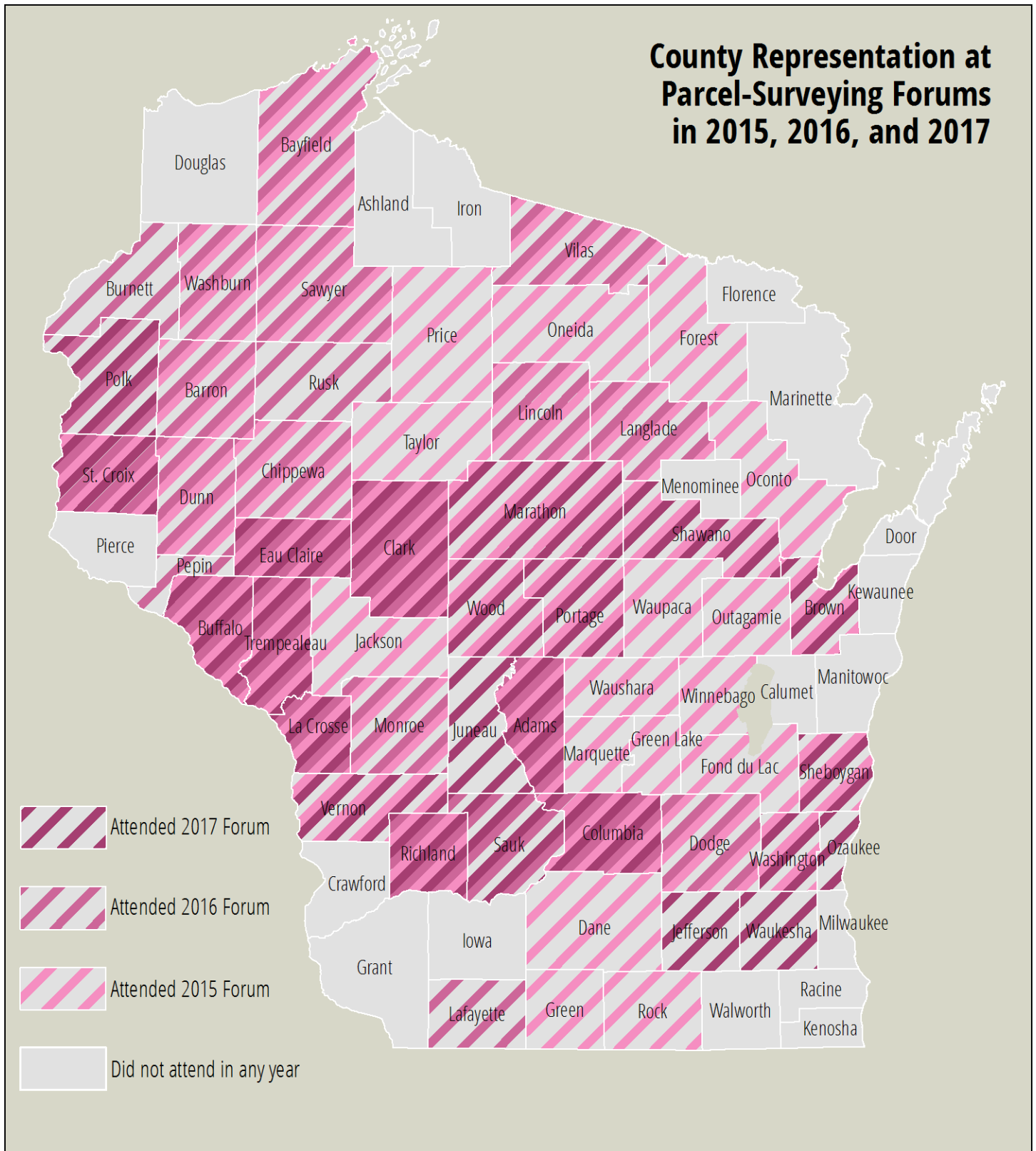
Counties are one of the primary focus areas for outreach because responsibility and funding of PLSS maintenance, parcel mapping, and legal record keeping occurs at the county level.



County Representation over Time

The map below shows county representation totaled over all three forums in 2015, 2016, and 2017. All but 18 of Wisconsin's counties have attended at least one of the forums, and 30 counties have attended more than one.

Total registration at all three forums is almost 250 people, including individuals working in counties, state agencies, the federal government, the private sector, regional government, non-profits and associations, and higher education.



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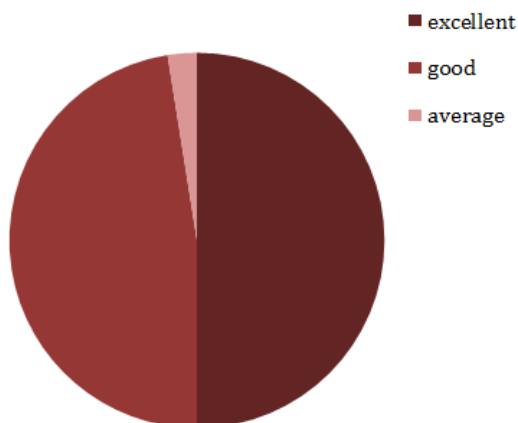
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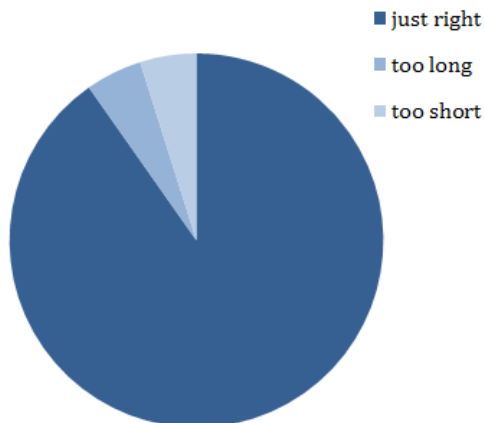
Evaluations

A total of 41 evaluations were submitted. Results are summarized in the graphs below. Results show that the forum was very well received by participants.

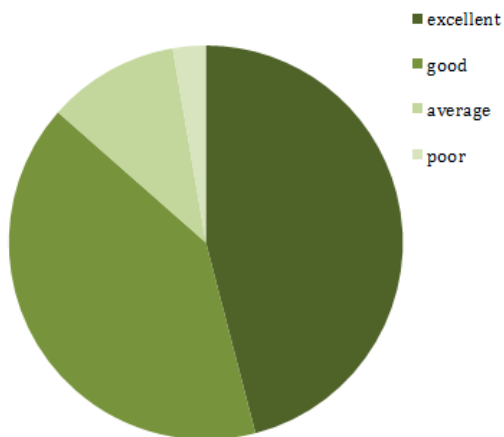
Overall Assessment of Forum



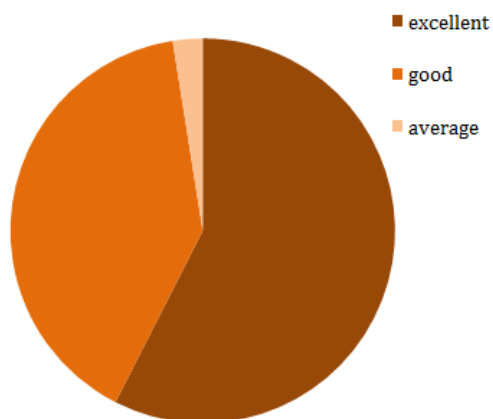
Length of Forum



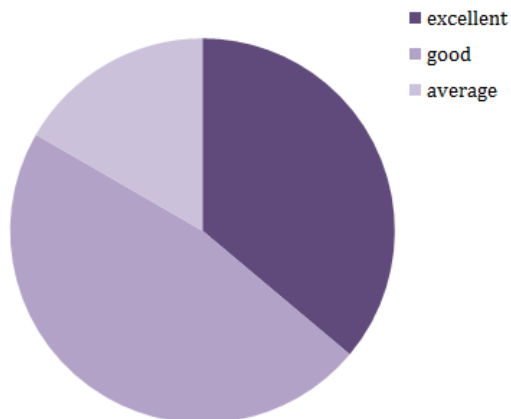
Usefulness of Field Trip



Applicability of AM Session



Applicability of PM Sessions



Evaluations

Below are the comments received on the forum evaluations. These are unedited except for spelling.

Comments

excellent forum!

good discussion and value

good information, too many paragraphs on slides, didn't really add value

how many decision makers from counties who needed to be here were in attendance? i.e., elected politicians who make the final decisions? Brenda, please email w/results the number of county board people? Number of counties represented.

I personally enjoy a presentation more than a panel, but I think both is a good mix

put speakers in two front corners of room

steve geiger was excellent

Thanks so much! Can't believe it was free!

The afternoon presentations were good but since I do not deal with GIS on a daily basis, I felt it was beyond my scope of knowledge.

this is fascinating to me and I learned a lot today. It seems that today's "methodology" seems to be placing less significance on "old-school" methods and the importance of surveyors. I love coming to forums like this which include people from all interest groups!

This was a great forum and I am glad that I took time to attend. Thank you.

thought it was great! Look forward to the next one!

turn off the background music in the room and the air conditioning

very enjoyable and informative

very good presentation!

very well organized, topics and conversations kept crowd interested and involved. Would come again and suggest to others.

well done

Other topics of interest

An interesting discussion would be should we still maintain monuments! Basis for discussion: 1) discount that monuments are required by law - laws change; 2) monuments are permanent - we lose 10% per year; 3) it was stated today that surveyors will replace lost monuments using GPS--so why can't we let surveys use GPS also. Premise: If all corners have been relocated and properly occupied to get good GPS, why do we need monuments?

case studies, GNSS technologies, WCCS vs WISCRS, GIS Structure derived from survey data

government lots

Gov't lots/meanders

I think it might be interesting to follow this up with some case studies. Kind of like what Steve walked through with his 40's that weren't 40s. It would be interesting to learn about some complex surveys that corrected parcels for large landowners, like institutions or government agencies, i.e., DNR, etc.

I was hoping to learn more about how other counties use and process PLSS data in the parcel fabric

maybe bring in a title aspect for some and how deeds are used for surveys if not 1/4 1/4

maybe more on resolving disputes and discussions about working with external surveyors and landowners

real property rights as they relate to updated survey data

relative to surveying native american burial mounds

statewide parcel map

surveys matching GIS information

The future of jobs/opportunities in the surveying field

there are no many better options of venues in the dells.. even the smaller ones have great facilities

working with ArcMap software; coordinate systems

What you liked best

all good

finding similar links of interest among various stakeholders

good open discussion

hiking to and seeing an original corner

honesty, unveiling the facts

I am particularly interested in how GIS and surveying are related and how folks work together when conflicts arise. Very happy that your panel spoke to that

I enjoyed learning about what surveyors do and how they get/collect the information to do their job. As a Register of Deeds I get to see the finished product in the form of a CSM, but never understood what goes into getting the information for those surveys.

informative enough for me to be able to utilize and pass on info to the general public with questions and land leins, etc.

morning presentation background on surveying in the state was interesting

Q/A

see the day in/out methods of doing surveys

seeing original evidence in the field; breakdown of original field notes

seeing the post marker

steve's presentation

talk of PLSS base

that it worked for all types of professions - not just GIS. Most sessions have become very GIS specific

the content flowed well

the field trip

the field trip

the give and take and broad experience from across the state

the roundtable discussion time

this was a good presentation to learn just how important this data is for accurate mapping

understanding the complexity of the issue; 40's are meant to be square and rarely are.

visiting the PLSS corner; all of the knowledgeable presenters

What could be improved?

breakfast

different perspectives

examples of corners that were "off" between neighbors

having it be longer; maybe more than a day

hmmm...not sure

I think involving people (bringing people in the audience) more from the margins of the geospatial discipline would be a benefit to all...though I know this is NOT easy to do

I would have liked to see how a surveyor actually does a survey and/or see the tools that they currently use to perform a survey.

no rain

perhaps get WSLs here to man a table and get people interested in the profession

weather! Use of surveying equipment; announcement was a little misleading. I thought we would be actually trying to find an original monument

Next Steps

Based on the comments received in the evaluations and informal feedback from participants, there seems to be agreement that the surveying and geospatial communities need to continue to communicate, debate their perspectives, and try to identify common interests. With this in mind the State Cartographer's Office, in consultation with the PLSS Work Group, plans to continue hosting these forums on an annual basis. We anticipate that our next forum will be in a location where we have attracted fewer participants at past events, such as the south-west, north-east, or Milwaukee area.

These forums help foster the development of a strong professional relationship between the surveying and geospatial communities in the state. While surveyors and geospatial professionals do not see eye-to-eye on all issues, we are fortunate in Wisconsin to have individuals who are willing to expend time and effort educating and explaining their perspectives for the ultimate benefit of the state's citizens.

These forums emphasize finding common ground among diverse viewpoints. As such, it is important that we provide opportunities for all perspectives to be shared and debated, including, but not limited to, those of professional surveyors. This factor needs to be kept in mind as we organize future events.

There appears to be a growing sense of the importance of PLSS control to maintain accuracy in the parcel network through the state. Given that the Wisconsin Land Information Program is funding county PLSS remonumentation through its Strategic Initiative Grants Program, we sense that there is broad support within the land information community for PLSS investment.

Finally, in the spirit of the Wisconsin Idea, we are pleased that the forums continue to attract non-professionals, including students and the general public. We are fortunate to have had access to Outreach Incentive Grant funds over the last three years, and we hope to be able to find other sponsors as we move forward.

Contact Us!

We are interested in your thoughts and ideas, and your suggestions on how to move forward. Please contact us.

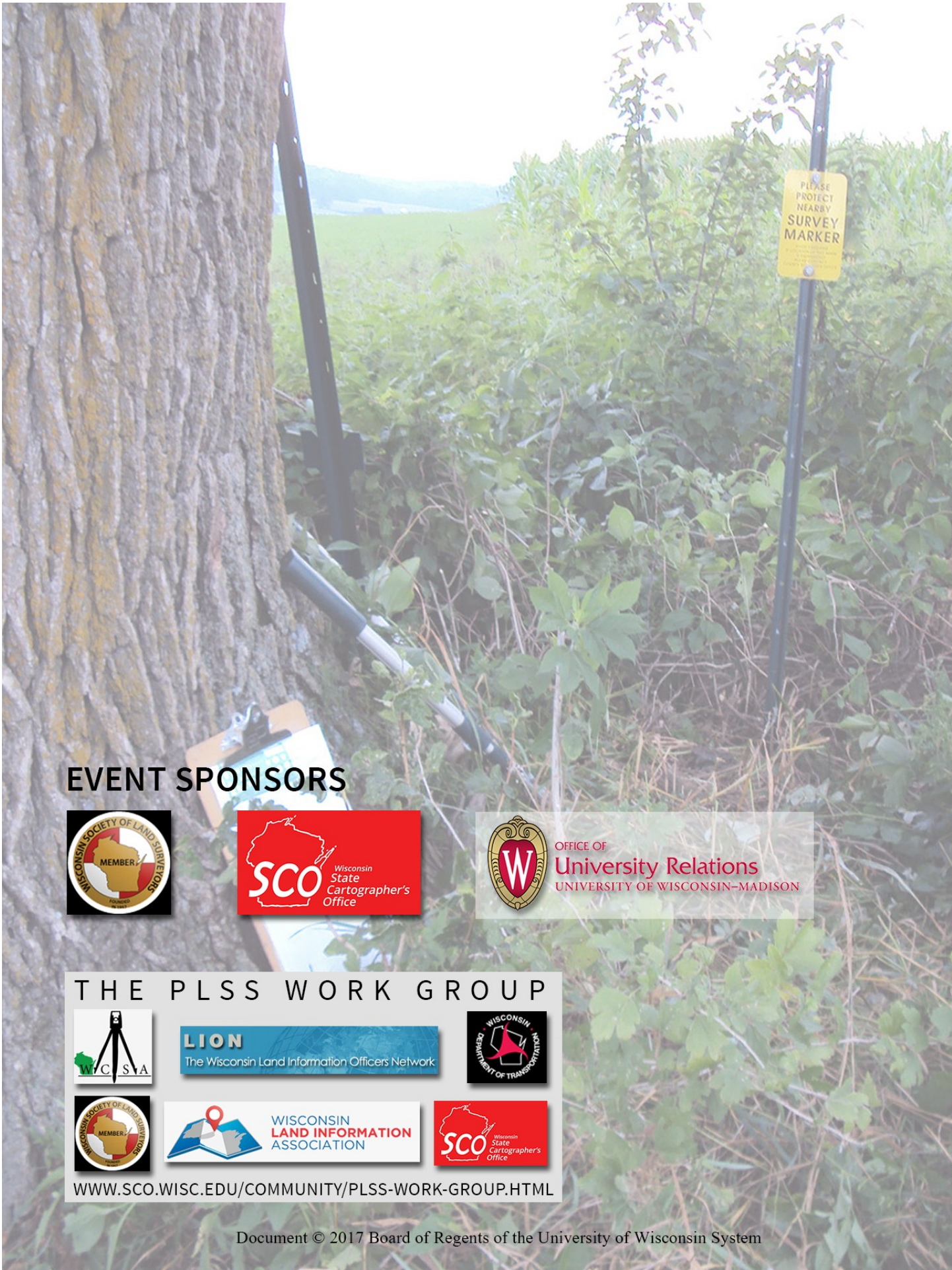
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Acknowledgements

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We would also like to thank the Wisconsin Society of Land Surveyors for their generous financial support for this event.



EVENT SPONSORS



THE PLSS WORK GROUP



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