

Workshop Sponsored by:

**The Wisconsin Society
of Land Surveyors**



To meet the Challenge of NSRS 2022,

**New Reference Frames, Datums,
Measurement Units and
Map Projection & Design.**

**Friday, March 13, 2020
Kalahari Resort and Convention Center
1305 Kalahari Drive,
Wisconsin Dells, WI 53965**

**Instructors: Professor Alan Vonderohe and Dan Rodman
Six (6) Professional Development Hours (PDHs) for full participation**



Biography Of: Alan Vonderohe

Alan Vonderohe is Professor Emeritus of Civil and Environmental Engineering at the University of Wisconsin-Madison, where he taught over thirty courses ranging from Cadastral Systems, to Legal Aspects of Land Surveying, Spatial Reference Systems, Introductory and Advanced Adjustment Computations, Land Information Systems, Engineering Applications of GIS, Spatial/Temporal Data Modelling, Introductory and Analytical Photogrammetry, and Introductory and Advanced Engineering Design. His research ranged from accuracy of digital spatial data, to early applications of GPS, automation of spatial analytical operations, spatial data fusion, GIS for transportation, conceptual modelling of linear referencing systems, development and implementation of multi-dimensional technologies for transportation applications such as winter maintenance and automated machine guidance, and enterprise strategic planning for spatial technologies. Alan participated in early Wisconsin activities in land records modernization and later was instrumental in development of Wisconsin Coordinate Reference Systems (WISCRS). He helped form the Land Information Systems Committee of WSLS and was its first chairperson. He is currently co-chair of the Technical Focus Group for the Wisconsin Spatial Reference Systems Task Force (WSRS2022).



Biography Of: Dan Rodman

Dan Rodman is a Wisconsin Professional Land Surveyor with the City of Madison Parks Division, where he is a custodian of decades of spatial data in existing coordinate reference systems, and faces the practical challenge of relating it to the 2022 systems. He earned his Bachelor's Degree and Master's Degree in Civil and Environmental Engineering from the University of Wisconsin-Madison, and taught introductory surveying-related courses there as a lecturer. He is a member of the

Technical Focus Group for the Wisconsin Spatial Reference Systems Task Force (WSRS2022), and also a member of the Wisconsin Society of Land Surveyors and the Madison Area Surveyors Council.

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Registration and Continental breakfast 7:30 a.m. to 8:30 a.m.

Morning Session begins at 8:30 a.m.

During the morning session Dan will start with Units and Geometric Reference Frame Changes (No More U.S. Survey Foot) and what it means to you; Geometric Reference Frames (NATRF2022 Replaces NAD 83); Map Projection Coordinate Systems (Briefly); and Strategies to use now to prepare for the changes.

Refreshment break at 10:15 a.m.

In the second morning session, Dan will talk about Geopotential Datum (NAPGD2022 replaces NAVD 88); NAPGD2022 vs NAVD 88; and Strategies you can use.

Lunch 12:00 -12:45 p.m.

Afternoon Session begins at 12:45 p.m.

In the first session in the afternoon, Professor Vonderohe will discuss Characteristics of Map Projections;

Types of Map Projections; Tissot's Indicatrix, Examples; Mathematical Constructs; Design Challenge: Selecting Projection Type and Parameters that Meet Needs; Conformal Map Projections; Institutionalized Map Projections, UTM, WTM, SPCS 83, WCCS, WISCRS and What is SPCS 2022? Statewide, Redesigned Traditional SPCS 83, LDPs.

Refreshment break at 2:15 p.m.

in the second afternoon session, Professor Vonderohe will discuss Map Projection Design; Designing at Earth's Surface; Low-Distortion Projections (LDPs); Wisconsin's LDPs (WCCS and WISCRS); Case Studies of Near-Earth's Surface Design and LDP Design; and a Summary.

Finish at 4:00 p.m.

Continuing Education:

This workshop will qualify for Wisconsin mandatory continuing education. Under A-E 10 you are required to obtain a minimum of 2 PDHs in each of the three categories. This workshop may be used for land surveying and other related sciences based on the value received by the participant in those categories.

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Workshop fee:
WSLS member: \$95,
All others: \$150

Your name _____

Company _____

Address _____

City _____ State _____ Zip _____

Email address _____

Workshop fee includes handouts, continental breakfast, refreshments and noon luncheon.
Please, only one person per registration form, however, this form may be duplicated.
(Returns accepted postmarked on or before March 10, 2020)

Make check payable to: **Wisconsin Society of Land Surveyors**
Send to: Francis R. Thousand, Executive Director
Wisconsin Society of Land Surveyors
5113 Spaanem Ave
Madison, WI 53716

Or by credit card in the Store on www.wsls.org

Six (6) Professional Development Hours (PDHs) for a full day of participation.

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