

Wisconsin Spatial Reference System 2022 Task Force Proposed Process and Procedures, Dec. 2018

1. Mission Statement

In 2022 the National Geodetic Survey (NGS) will replace NAD 83 and NAVD 88 with new horizontal and vertical reference systems:

- North American Terrestrial Reference Frame of 2022 (NATRF2022)
- North American-Pacific Geopotential Datum of 2022 (NAPGD2022)

These changes will have significant effects on surveying, mapping and GIS across Wisconsin. Accordingly, the **Wisconsin Spatial Reference System 2022 Task Force (“WSRS 2022”)** has been organized under the Geospatial Committee of the Wisconsin Society of Land Surveyors (WSLS). Howard Veregin, Wisconsin State Cartographer, will chair the Task Force, and Richard Kleinmann, who chairs the WSLS Geospatial Committee, will be co-Chair.

The Task Force represents a broad coalition of geospatial and surveying professionals in Wisconsin, including federal, state, regional, county and local governments, and agencies, corporations and associations involved in the production and utilization of spatial data.

The mission of WSRS 2022 is to help ensure successful implementation of the new reference systems across the state.

WSRS 2022 will address the technical, educational, communication, legislative and software aspects required to respond to NGS plans to better position Wisconsin to implement the new reference systems.

2. Focus Groups

WSRS 2022 will coordinate the efforts of a number of Focus Groups with specific goals that tie into the larger Task Force mission. The goals of these Focus Groups are listed below.

a. Technical Focus Group

Goals: Develop a proposal that is ready for review and approval by the Task Force for the NGS deadline of Dec. 31, 2019. This proposal should consider all three tiers of Wisconsin’s spatial reference system structure: WISCRS; a three-zone State Plane Coordinate System modeled on the current SPCS zones; a single zone for the entire state, possibly based on Wisconsin Transverse Mercator. Per NGS guidelines, the proposal should include a formal request for NGS-designated zones (SPCS and WTM) and a formal proposal for zones designed by Wisconsin (WISCRS). The Focus Group should also consider the impacts of the new vertical reference system (NAPGD2022).

b. 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, with possible reference to model legislation developed nationally. Develop a timeline to fit legislative calendars.

c. Education and Outreach Focus Group

Goals: Help “spread the word” and educate the community about the new reference systems and their implications for geospatial data and workflows. Includes education of software vendors and developers, surveyors, utilities, GIS practitioners, educators, and students. Both educators and current users/practitioners must be included in this effort, to help identify issues and to bring both sides of the education equation together.

d. Software/Hardware Focus Group

Goals: Develop plans to incorporate the new reference systems into hardware and software in a timely and accurate manner, and in a way that serves the needs of the state’s users. Initiate registration of new/modified Wisconsin coordinate systems with EPSG. Work with NGS to incorporate these coordinate systems into publications and transformation software, including NCAT or a Wisconsin-specific extension to NCAT.

e. Implementation and Adoption Focus Group

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

3. Focus Group Coordination

Each Focus Group has a designated “coordination lead” (or leads) who will be asked to facilitate the creation of the group by identifying and inviting those individuals who are willing to serve as

Focus Group members. Note: Focus Group coordination leads will be provided with a standard “template” to provide consistent messaging for inviting members to join.

Suggested members for each Focus Group (as listed above) include individuals from the initial “NATRF2022 Discovery Team” created in the summer of 2018, as well as stakeholders identified by the Discovery Team and others. However, this is only a starting point, since not all Discovery Team members may wish to serve on a Focus Group, and since there may be other important stakeholders who have inadvertently been left off the list.

Leads should reach out to the community to add additional members as needed, and should try to obtain broad representation of members and include members from various parts of the state.

We would like to have the beginnings of the Focus Groups formed before the January 23-25, 2019 WSLs Surveyor’s Institute with final gaps filled by the WLIA Annual Conference on February 20-22, 2019.

After initial creation, Focus Groups can elect a Chair and co-Chair or organize themselves in whatever way the group thinks is most effective.

Focus Groups are responsible for further defining their goals, including a list of deliverables with a timetable for completion. Deliverables might be products, recommendations, presentations, reports, or whatever is needed to fulfill the group’s objectives. This deliverable list will evolve and change over time.

Group goals need to account for NGS deadlines in Dec 2019 and Dec 2020, although these deadlines may be more relevant for some groups than for others.

Groups are responsible for providing a representative at quarterly meetings of the Task Force, and for providing an update report detailing the status of deliverables/goals at these meetings.

Time commitments for group members can be highly variable. Groups are encouraged to discuss time commitments at an early stage, and to allow members to self-select for various roles in the group based on their ability to commit volunteer time.