

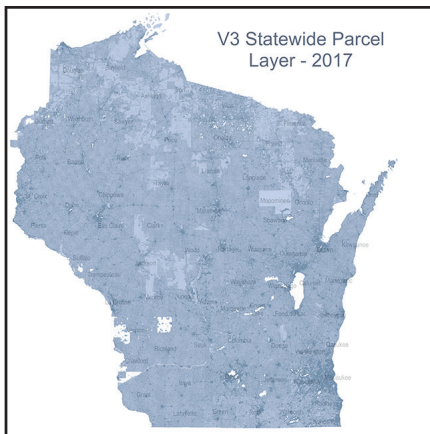


# V4 Statewide Parcel & PLSS Project

## Project Background

The Wisconsin Department of Administration (DOA) has finalized an agreement with the State Cartographer's Office (SCO) for a Version 4 Statewide Parcel Map Database Project (V4). This project will improve upon the successes of the previous statewide parcel layers, and expand to add value through the creation of a statewide PLSS layer.

In producing Wisconsin's statewide parcel map database<sup>1</sup> based on an aggregation of local parcel datasets, the Parcel Initiative has forged a foundation



for the creation of publicly-available standardized statewide GIS data layers. The V4 Project is the fourth phase of the larger Statewide Digital Parcel Map Initiative, DOA's multi-year, multi-faceted plan to develop and implement a

statewide parcel map as established by Act 20, the state's 2013-15 biennial budget bill, and detailed in state statute 59.72.<sup>2</sup>

Successive projects (V1, V2, and V3) under the Parcel Initiative have taken an approach of incremental improvement, whereby the workflow for each step in the process has improved with each new version of the layer.

Increased efficiency in data intake and aggregation processing has facilitated an opportunity to take Wisconsin's efforts in statewide GIS to the next level. V4 will include the collection and aggregation of local PLSS corner data, culminating in an initial statewide PLSS layer.

## Why a Statewide PLSS Layer?

A 2017 legislative white paper<sup>3</sup> from the Wisconsin Land Information Association made a case for a modern, spatially accurate statewide PLSS layer:

Many of the PLSS markers placed in the ground 150 years ago are now long gone. While much work remains, counties across the state are working to re-build the PLSS infrastructure in Wisconsin, and then more accurately map land holdings throughout our state.

Unfortunately, state and federal agencies working in Wisconsin typically use their own sources of PLSS information because the data produced by local governments are not available to them due to a variety of technical, political, and institutional barriers.



A June 2017 letter<sup>4</sup> from the Wisconsin County Surveyors Association also strongly supported the creation of a modern statewide PLSS layer, stating:

The consensus is that, in addition to completing PLSS remonumentation, we should use PLSS data to solidify our statewide parcel map.

In a survey conducted by the Wisconsin Geographic Information Officer in 2017, a majority of respondents ranked PLSS and related control data as being of high or critical importance.

The need for PLSS data is also apparent in access statistics for the Landnet<sup>5</sup> dataset. Landnet is a statewide PLSS dataset developed in the 1990s by the Wisconsin Department of Natural Resources using data digitized primarily from 1:24,000-scale printed topographic maps. Landnet was designed as a spatial representation of PLSS for cartographic reference only, to provide a framework to represent DNR property boundaries. While Landnet has served this purpose well, an updated, spatially accurate version of PLSS using county coordinate data is long overdue.

A statewide PLSS layer will serve as a tool to monitor the progress of PLSS data development, help to analyze geospatial accuracy of the parcel layer, and aid in identifying and resolving county boundary gaps and overlaps.

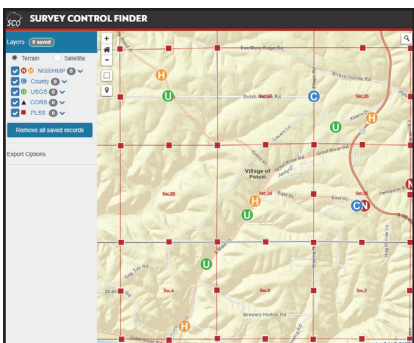
Proportionally, the largest segment of Wisconsin Land Information Program funds counties devote to land records modernization is dedicated to PLSS completion and integration. Those counties using grant funds for PLSS are required to integrate PLSS corners into the county parcel network. Thus, the investment in PLSS improves parcel map accuracy, one of the most important of foundational layers.

## PLSS Project Deliverables

In addition to producing a statewide parcel map database, V4 will also produce a “Version 0” statewide PLSS corner point layer that:

- is based on accurate county corner coordinate values where available, and Landnet coordinates in other areas;
- for selected points, includes attributes such as a coordinate accuracy tag for new/updated corners (survey-grade, sub-meter, or approximate);
- is indexed where data is available to a statewide point indexing scheme; and
- has database download capability.

The “Version 0” layer will be a preliminary dataset designed to facilitate development of a “Version 1”



statewide PLSS layer that will contain lines and polygons as well as points. The Survey Control Finder<sup>6</sup> application developed by the State Cartographer’s Office is the current access point for much of the state’s local PLSS point data.

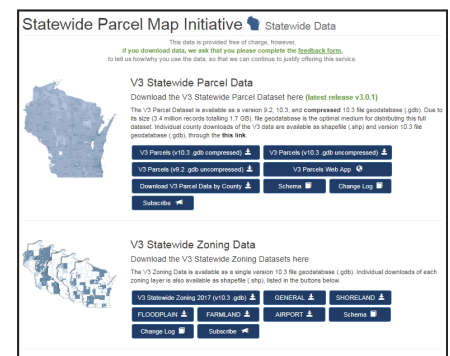
A main goal of the project is to use accurate county coordinate data wherever available, to improve spatial accuracy and completeness beyond Landnet and other existing PLSS representations (e.g., the Bureau of Land Management’s national PLSS layer<sup>7</sup>). A long-

term goal of the project is to develop the capability for automated data updates, which will allow the most current county data to be reflected in the statewide dataset to address users’ needs for up-to-date information. As with the statewide parcel layer, users will be directed to consult local governments for the most current local data.

## More Information

The V4 project began in January 2018 and will end on December 31, 2018, with \$117,122 in funding for the statewide parcel and PLSS layers.

From the State Cartographer’s Office website<sup>8</sup> you will find links to download the statewide parcel data<sup>9</sup> provided free of charge. An online app is available on this site for users who wish to view and query the statewide parcel data within a web browser.



## Web Resources

1. Wisconsin’s statewide parcel map database  
<https://doa.wi.gov/Pages/LocalGovtsGrants/Parcel-Initiative.aspx>
2. State statute 59.72  
<https://docs.legis.wisconsin.gov/statutes/statutes/59/VII/72/2/a>
3. WLIA legislative white paper  
<https://drive.google.com/file/d/0B4X7NZQx-4rXdXI0S0Y0Z3dsVk0/view>
4. WCSA letter  
[https://doa.wi.gov/DIR/WCSA\\_Support\\_for\\_Statewide\\_PLSS\\_Layer\\_2017-06-06.pdf](https://doa.wi.gov/DIR/WCSA_Support_for_Statewide_PLSS_Layer_2017-06-06.pdf)
5. DNR Landnet dataset  
[http://dnr.wi.gov/maps/gis/documents/landnet\\_doc.pdf](http://dnr.wi.gov/maps/gis/documents/landnet_doc.pdf)
6. Survey Control Finder application  
<https://maps.sco.wisc.edu/surveycontrolfinder>
7. Bureau of Land Management national PLSS feature service  
[https://gis.blm.gov/arcgis/rest/services/Cadastral/BLM\\_Natl\\_PLSS\\_CadNSDI/MapServer](https://gis.blm.gov/arcgis/rest/services/Cadastral/BLM_Natl_PLSS_CadNSDI/MapServer)
8. State Cartographer’s Office website  
<https://www.sco.wisc.edu>
9. Statewide parcel data download site  
<https://www.sco.wisc.edu/parcels/data/>