



**MINNESOTA
IT SERVICES**

Legislative Report

Public Land Survey System Preservation Grant Program

October 2023

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Minnesota Statutes, Chapter 3.197, requires the disclosure of the cost to prepare this report. The estimated cost of preparing this report is \$985.46.

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I. Executive summary

This report summarizes the work completed to date on the Public Land Survey System (PLSS) remonumentation program funded by the 2023 Minnesota legislature. This pilot grant program will provide grants to Minnesota Counties to remonument the PLSS.

The PLSS is the foundation of property boundary descriptions in Minnesota. An essential part of the PLSS is physical marker or public land survey (PLS) monument, at every corner within the PLSS network. Over 312,000 such corners were originally set in the state between 1847 and 1908. Many of the PLSS corner monuments were set with wooden posts. Many of the original PLSS corners have been destroyed or buried and need to be replaced. Additionally, less than half of the PLSS corners have been certified by a licensed land surveyor as required by Minnesota Statutes (2022) 381.12.

This grant will fund both the replacement or remonumentation of the corner monuments and their certification by a licensed land surveyor.

The PLSS corner monuments are foundational infrastructure that define the location and the boundaries of every parcel of land in Minnesota. Accurate monuments in Minnesota ensure that property boundaries are accurately described in recorded documents, taxpayers are assessed accurately, and help reduce unnecessary litigation over land boundaries. An accurate PLSS also provides an accurate foundation for geospatial (mapping) data in Minnesota that support effective data-driven policy and decision making.

The PLSS Preservation funding was available starting on July 1, 2023. Since then, the Minnesota Geospatial Information Office (MnGeo) has worked in coordination with the Minnesota Geospatial Advisory Council (GAC) to start up the program.

As specified by the legislation, this report provides updates on the work in three areas, a summary of which is provided below.

1. A summary of the chief geospatial information officer activities regarding administration of this grant program for the previous fiscal year, including the amount of money requested and disbursed by county.

The work done to date to create the structure for the PLSS remonumentation grant program has included the creation of a GAC Committee to formalize the way the Surveyor and Geospatial communities can contribute to the grant process. MnGeo interviewed applicants for a full-time Survey Coordinator who will create, manage, and report on the PLSS remonumentation grant program. This candidate for this position is anticipated in late October 2023. MnGeo staff met with the Department of Administration, Office of Grants Management (Admin-OGM), and provided a draft document describing the grant program. Admin-OGM reviewed and provided feedback recommending that the document should be completed after the coordinator is on staff.

2. An assessment of the progress toward completion of necessary monument restoration and certification by county.

Legislative funds will be distributed by grants to counties for them to hire licensed surveyors, first to remonument, or replace, the original monuments with modern, durable monuments, and second to certify their locations as per Minnesota Statutes (2022) 381.12.

This report provides a table of monument restoration and certification by county. In the state of Minnesota, there are approximately 312,000 original monuments and 149,886 of those are currently certified, or about 48%. The current legislation for \$9.7 Million, that includes 6 percent for administration costs, could support the certification and remonumentation of approximately 4,500-5,200 monuments depending on the remoteness and complexity of each monument.

3. A forecast of the amount needed to complete monument recertification in all counties.

Less than half of the PLSS corners in Minnesota have been certified by a licensed land surveyor. The average cost to remonument and certify a PLSS corner is approximately \$1,800 with costs higher in remote areas of the state. The total amount needed to complete monumentation is at minimum \$293 Million. Factoring in that some remote monuments will be more expensive; the total estimated cost would be \$350 Million. That estimate includes grant administrative costs of 6-10 percent.

II. Legislation

[Minnesota Session Laws – 2023, Regular Session, Chapter 62 \(House File 1830\)](#)

Article 1, Section 10 (f)

(f) Public Land Survey System. \$9,700,000 the first year is for the grant program authorized by Minnesota Statutes, section 381.125, and for grants to counties to employ county technical staff to aid surveyors making land survey corners. Up to six percent of this appropriation may be used by the chief geospatial information officer for the administration of the grant program. This is a onetime appropriation and is available until June 30, 2027.

Article 1, Section 111

Sec. 111. [381.125] PUBLIC LAND SURVEY SYSTEM MONUMENT GRANT PROGRAM.

Subdivision 1.

Grant program.

The chief geospatial information officer, through the Geospatial Advisory Council established under section 16E.30, subdivision 8, shall work with the stakeholders licensed as land surveyors under section 326.02, to develop a process for accepting applications from counties for funding for the perpetuation of monuments established by the United States in the public lands survey to mark public land survey corners, as provided in section 381.12, subdivision 2, clause (1). Grants may also be used to update records and data regarding monuments. The chief geospatial information officer must establish criteria for prioritizing applicants when resources available for grants are not sufficient to award grants to all applicants. The criteria must favor providing grants to counties that demonstrate financial need for assistance.

Subdivision 2.

Report.

By October 1, in each odd-numbered year, the chief geospatial information officer must submit a report to the chairs and ranking minority members of the committees in the senate and the house of representatives with jurisdiction over state government and local government. The report must include the following:

- (1) a summary of the chief geospatial information officer activities regarding administration of this grant program for the previous fiscal year, including the amount of money requested and disbursed by county;
- (2) an assessment of the progress toward completion of necessary monument restoration and certification by county; and
- (3) a forecast of the amount needed to complete monument recertification in all counties.

Subdivision 3.

Nonstate match.

No nonstate match is required for grants made under this program.

III. Introduction

PLSS Section corners serve as a foundation for boundary data and decision making in Minnesota. They serve as a key resource for determining many things from property ownership to voting precincts, to taxing districts. In the 2022-2023 legislative session, funds were appropriated to support the remonumentation, restoration and certification of this important resource for Minnesota. This report describes the work done to date in support of the Public Land Survey System (PLSS) preservation program.

Purpose of report

This purpose of this report is to describe the work done to date in support of the PLSS preservation program, and upcoming and planned tasks.

IV. Background

The PLSS is the foundation of property boundary descriptions in Minnesota. An essential part of the PLSS is physical marker or public land survey (PLS) monument, at each corner within the PLSS network. Minnesota has over 312,000 PLSS corners in the state. This system was started in 1847 and completed in 1905. Many of the PLSS corner monuments were set with wooden posts as markers. Many of the original PLSS corners have been destroyed or buried and need to be replaced. Additionally, less than half of the PLSS corners have been certified by a licensed land surveyor.

This program focuses on funding the replacement or remonumentation of markers and their certification by a licensed land surveyor. The program will also require that corners, funded by this program, be located to a degree of accuracy that allows for updating of geospatial mapping products. The grant will also fund the updating and sharing of monument records (i.e., digitization of corner certificates, field notes, maps and other pertinent records). The following sections will provide information requested in legislation: 1) a summary of the chief geospatial information officer activities regarding administration of this grant program for the previous fiscal year, including the amount of money requested and disbursed by county; 2) an assessment of the progress toward completion of necessary monument restoration and certification by county; and 3) a forecast of the amount needed to complete monument recertification in all counties.

V. Public Land Survey System (PLSS) Preservation Grant Program Creation and Administration

This section includes a summary of the Minnesota chief geospatial information officer (GIO) activities regarding administration of this grant program. In future reports, this section will summarize activities from the previous fiscal year, including the amount of money requested and disbursed by county; however, since the legislative funding began in July 2023 there is limited progress to report at this time. The work to create and operationalize

administration of the program has focused on hiring a position to manage the grant, setting up a mechanism to involve the Minnesota surveying community in the grant process and drafting a grant proposal document. These efforts are described in further detail below.

Create Program Structure

Survey Coordinator

To successfully implement this program, MnGeo is hiring a Surveyor Coordinator to create, manage and report on the PLSS Preservation Grant. This position has a minimum requirement of being licensed surveyor to ensure the subject matter expertise required to effectively manage this grant and serve the Minnesota Counties in their PLSS preservation efforts. The goal is to have the position onboard at MnGeo in late October 2023.

Grant Proposal Definition

MnGeo staff started work on a grant proposal definition in July, with input from the Geospatial Advisory Council (GAC) and the Minnesota surveyor community. This draft proposal was shared with the Department of Administration's Office of Grants Management (OGM) in July. The OGM Director reviewed and provided feedback on the grant program documents, and recommended waiting to complete until the MnGeo Survey Coordinator is on staff.

Grant Program Deployment

To deploy the PLSS grant program, a grant software product and process will be required so that applicants can apply for grants and monitor the status of their applications. Additionally, the software will be used for the MnGeo Survey Coordinator to review and track grant applications and grant recipients. MNIT plans to implement a shared solution with another grant-making division in MNIT to realize improved return on investment and reduced administrative costs.

Community Involvement

MnGeo, by statute, is advised by the Geospatial Advisory Council (GAC). The GAC acts as a coordinating body for the Minnesota geospatial community. It represents a cross-section of organizations that include counties, cities, universities, business, nonprofit organizations, federal and state agencies, tribal government, surveyors and other stakeholder groups that benefit from geospatial data and technology.

It is important that the geospatial community is involved in the PLSS remonumentation program process. To accomplish this, the GAC approved a new committee, the "PLSS Preservation Committee" to provide input to the PLSS remonumentation grant process. The committee recognizes that its role is advisory and the GIO makes final determinations on grant funds, in alignment with applicable statute. The committee created a charter, and its objectives and deliverables are to:

- Advise Minnesota Geospatial information Officer (GIO) and the Minnesota Geospatial Information Office (MnGeo) in developing a PLSS Preservation grant program pursuant to 381.125.

- Advise the GIO and MnGeo on criteria for reviewing grant applications and their prioritization.

When hired, the MnGeo Surveyor Coordinator will chair this committee with the GAC Surveyor representative as co-chair and serve as the primary lead for outreach and collaboration with the geospatial community. See [IX](#). [Appendix](#) for link to Committee web page.

VI. PLSS Preservation Progress in Minnesota

This section includes an assessment of the progress toward completion of necessary monument restoration and certification by county in Minnesota.

In the state of Minnesota, there are over 312,000 original monuments in Minnesota, and 149,886 of those are currently certified monuments, or about 48%. The current legislation for \$9.7 Million, that includes 6% administration costs could support the certification and remonumentation of approximately 4,500-5,200 monuments depending on the remoteness and complexity of the monument.

The table below provides the number of PLS corners by county, the number of certified corners (and percentage) and the number of remaining corners to be certified (and percentage). A map is provided after the table that shows PLSS Corner remonumentation by county.

Table 1 Table of Public Land Survey Corners Remonumentation Status by County

County Name	Total PLS Corners	PLS Certified Corners	Percent Certified	PLS Corners to be Certified	Percent to be Certified
Aitkin	6,651	2,000	30%	4,651	70%
Anoka	1,556	1,556	100%	-	0%
Becker	8,135	2,674	33%	5,461	67%
Beltrami	12,163	3,910	32%	8,253	68%
Benton	1,330	1,200	90%	130	10%
Big Stone	1,820	259	14%	1,561	86%
Blue Earth	2,480	1,455	59%	1,025	41%
Brown	1,980	1,743	88%	237	12%
Carlton	2,800	1,300	46%	1,500	54%
Carver	1,400	1,400	100%	-	0%
Cass	11,157	4,905	44%	6,252	56%
Chippewa	1,882	1,181	63%	701	37%
Chisago	1,700	1,700	100%	-	0%
Clay	3,560	2,726	77%	834	23%
Clearwater	7,253	1,900	26%	5,353	74%
Cook	6,347	1,901	30%	4,446	70%
Cottonwood	2,165	608	28%	1,557	72%
Crow Wing	4,100	3,261	80%	839	20%
Dakota	2,200	2,200	100%	-	0%

County Name	Total PLS Corners	PLS Certified Corners	Percent Certified	PLS Corners to be Certified	Percent to be Certified
Dodge	1,382	1,320	96%	62	4%
Douglas	2,760	2,661	96%	99	4%
Faribault	2,295	533	23%	1,762	77%
Fillmore	2,713	2,082	77%	631	23%
Freeborn	2,302	1,467	64%	835	36%
Goodhue	2,495	2,495	100%	-	0%
Grant	2,120	452	21%	1,668	79%
Hennepin	2,500	2,500	100%	-	0%
Houston	1,825	1,469	80%	356	20%
Hubbard	3,664	2,744	75%	920	25%
Isanti	1,670	1,516	91%	154	9%
Itasca	11,050	6,000	54%	5,050	46%
Jackson	2,313	496	21%	1,817	79%
Kanabec	1,700	1,200	71%	500	29%
Kandiyohi	3,169	2,320	73%	849	27%
Kittson	3,556	671	19%	2,885	81%
Koochiching	11,806	4,065	34%	7,741	66%
Lac qui Parle	2,350	1,699	72%	651	28%
Lake	7,500	1,250	17%	6,250	83%
Lake of the Woods	5,350	990	19%	4,360	81%
Le Sueur	1,673	910	54%	763	46%
Lincoln	1,891	1,314	69%	577	31%
Lyon	2,312	2,084	90%	228	10%
Mahnomen	6,971	350	5%	6,621	95%
Marshall	5,870	2,965	51%	2,905	49%
Martin	2,206	770	35%	1,436	65%
McLeod	1,818	1,885	104%	(67)	-4%
Meeker	2,300	1,150	50%	1,150	50%
Mille Lacs	2,200	1,600	73%	600	27%
Morrison	4,199	2,009	48%	2,190	52%
Mower	2,221	1,087	49%	1,134	51%
Murray	2,417	851	35%	1,566	65%
Nicollet	1,981	571	29%	1,410	71%
Nobles	2,307	654	28%	1,653	72%
Norman	2,876	343	12%	2,533	88%
Olmsted	2,116	2,120	100%	(4)	0%
Otter Tail	8,458	2,077	25%	6,381	75%
Pennington	2,227	681	31%	1,546	69%
Pine	5,005	3,479	70%	1,526	30%
Pipestone	1,504	1,282	85%	222	15%

County Name	Total PLS Corners	PLS Certified Corners	Percent Certified	PLS Corners to be Certified	Percent to be Certified
Polk	9,336	1,447	15%	7,889	85%
Pope	2,500	228	9%	2,272	91%
Ramsey	700	700	100%	-	0%
Red Lake	1,473	474	32%	999	68%
Redwood	2,836	850	30%	1,986	70%
Renville	3,074	883	29%	2,191	71%
Rice	1,720	1,560	91%	160	9%
Rock	1,578	643	41%	935	59%
Roseau	4,957	1,133	23%	3,824	77%
Scott	1,400	982	70%	418	30%
Sherburne	1,625	1,425	88%	200	12%
Sibley	2,825	2,034	72%	791	28%
St. Louis	27,000	13,000	48%	14,000	52%
Stearns	4,653	4,890	105%	(237)	-5%
Steele	1,396	1,184	85%	212	15%
Stevens	2,021	320	16%	1,701	84%
Swift	2,524	533	21%	1,991	79%
Todd	3,352	1,637	49%	1,715	51%
Traverse	1,823	244	13%	1,579	87%
Wabasha	1,730	1,569	91%	161	9%
Wadena	1,993	617	31%	1,376	69%
Waseca	1,440	150	10%	1,290	90%
Washington	1,525	1,109	73%	416	27%
Watsonwan	1,368	1,176	86%	192	14%
Wilkin	2,561	2,029	79%	532	21%
Winona	2,152	1,716	80%	436	20%
Wright	2,550	2,550	100%	-	0%
Yellow Medicine	2,468	812	33%	1,656	67%
All Counties	312,331	149,886	48%	162,445	52%

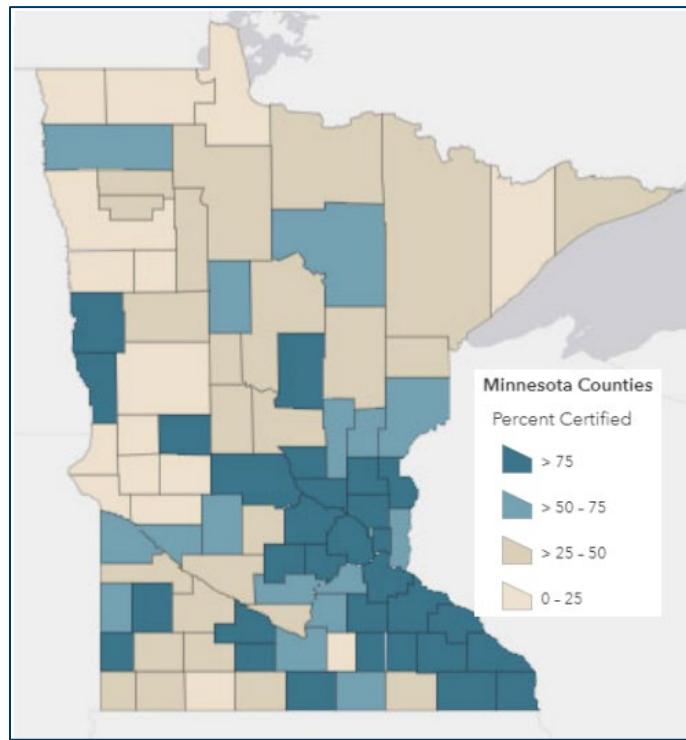


Figure 1 Map of Public Land Survey Remonumentation Status by County

VII. Minnesota PLSS Preservation Completion Forecast

This section of the report provides a forecast of the amount needed to complete monument recertification in all Minnesota counties.

Less than half of the PLSS corners have been certified by a licensed land surveyor. The average cost to certify a PLSS corner is approximately \$1,800 and even more in remote areas of the state. The total amount needed to complete monumentation is at minimum \$293 Million. Factoring in that some remote monuments will be more expensive, the total estimated cost, including administrative costs of administering a grant program (6-10%), could be as high as \$350 Million.

The current legislation for \$9.7 Million, that includes 6% administration costs could support the certification and remonumentation of approximately 4,500-5,200 monuments depending on the remoteness and complexity of the monument. This would increase the percentage of the certified monuments by approximately 1.6%

VIII. Next Steps

The next steps to be taken in the creation and implementation of the PLSS Remonumentation grant are:

- Complete hiring and onboarding process for MnGeo Survey Coordinator
- Complete PLSS grant program definition, including application and selection criteria.
- Deploy software for grant applications and tracking.
- Work with MNIT finance team to coordinate and ensure fiscal oversight.
- Provide outreach to Minnesota surveying and geospatial community to publicize grant program and encourage applicants.
- Provide updates on progress to the Minnesota legislative, surveying and geospatial communities, and include ongoing outreach about the importance of this effort and need to provide ongoing support of the program.
- Distribution of grants to counties by 2nd quarter of calendar year 2024 or earlier, if possible.

IX. Appendix

- PLSS Website (<https://plss-minnesota.hub.arcgis.com/>). This website describes the overall efforts to preserve the public land survey system, provides answers to frequently asked questions, and provides an interactive map of the state of PLS monuments by county.
- Geospatial Advisory Council (GAC) PLSS Preservation Committee webpage (https://www.mngeo.state.mn.us/committee/plss_preservation/index.html). This web page provides a summary of the GAC PLSS Preservation Committee that will advise MnGeo including its charter, objectives and deliverables, and committee leadership.