

A CASE FOR THE CONTINUING NEED FOR THE PERPETUATION AND MAINTENANCE OF THE CORNER MONUMENTS OF THE PUBLIC LAND SURVEY SYSTEM IN WISCONSIN.

The Wisconsin Society of Land Surveyors seeks to encourage continued funding for the monumentation, perpetuation and maintenance of the United States Public Land Survey System within the State of Wisconsin.

The United States Public Land Survey System (PLSS) was created by the Continental Congress in 1785. It was and still is the largest, most ambitious boundary survey effort in the history of the world.

Following the creation of the system, no significant provisions existed to fund the continuation or maintenance of the system for nearly 100 years.

The County Surveyor Law of 1969 (Chapter 499 of the Wisconsin Statutes) required that each year each county **shall** have 5% of its corners remonumented, so that in 20 years the projects would be completed. By 1971 counties realized the potential costs of such an undertaking, and encouraged legislative action to change one word: **shall** to **may**. Some counties recognized the need for monumentation and managed to find their own funding sources.

A second opportunity for the funding of remonumentation took place 15 years later. It was the creation of the nationally acclaimed Wisconsin Land Information Program. At the time, the land information community, including land surveyors, saw this as an opportunity to fund their respective projects, (i.e., monumentation). It was soon recognized that solidarity was necessary within the land information community. As a result, the groups banded together as one voice and created the Wisconsin Land Information Association. The surveyors, through WLIA's support, did achieve some success through its support of the State's grants to counties for remonumentation and other land records projects.

The Public Land Survey System is based upon a network of rectangular divisions of townships and sections. These rectangular divisions were and are presently intended to be the foundation and framework that provides a stable reference system for nearly all real property boundaries in the State of Wisconsin. The most important element that provides stability for the system is the monumentation of the corners on the ground. The monuments mark the corners of the rectangular divisions, being the sections and quarter sections. This is our only source of tracking ownership, for conveying interests and taxing lands. Original land patents were granted with descriptions originating from this system. Over time land has been divided and transferred, but still requires reference to this system.

Such a system is only as strong as its weakest element. The weakest element of this system is the lack of provisions for funding the restoration and perpetuation of the monuments marking the corners. Measuring technology has evolved to our current state of highly accurate, precise measuring capabilities enabled through Global Positioning Systems (GPS). Even with such capabilities, the monuments in their original positions are paramount. It is the monumented position on the ground that bears witness to the historic development of the respective boundaries and land interests. Each PLSS monument has a unique historic legacy. Maintaining that history of continuous occupation decreases the opportunity for variation. Decreased opportunity for variation increases the stability of the system. Irrespective of measuring abilities, the monument in the ground along with its historic legacy, physically marking the position is the most indisputable form of evidence. This fact is upheld by every level of our court system. Physical monumentation also reduces the misinterpretation, misappropriation of errors and differences in measurements resulting from varying measuring technologies.

Many of these monuments haven't been visited in years and some in decades or longer. Monument positions are being lost or obliterated due to age, degradation of materials or simply being destroyed. The cost of retracing these locations reactively is many times more than the cost of proactively perpetuating existing locations. Without a provision for funding the maintenance of the system the rate of degradation is compounded. This cost is often born by the first resident in the area that has a need to have their property boundaries identified.

Preserving and restoring this system has fallen upon the shoulders of County Government on behalf of its citizens. The system was initially funded and established by the federal government and then turned over to the states without instruction or funding. The loss of these corners or improper restoration can lead to very expensive restoration and retracement efforts and litigation. It also leads to additional burdening of our court system to resolve boundary and ownership issues. A well maintained system of monumented section corners would have eliminated numerous conflicts.

Governmental Land Information Issues.

Creating a reliable cadastral data set without an accurate, stable framework based upon monumented corner locations is both problematic and wasteful. Enormous amounts of personnel time are required to evaluate parcel boundaries that may not be consistent with monumented section and quarter section data. This is a direct result of depicting corner locations from secondary source data such as orthophotography and original government survey dimensions, instead of observed, monumented positions. With a lack of a well maintained stable framework of corroborative data one must assume legal description and mapping datasets are correct. A geographic information system based upon assumptions provides a system of information management whose reliability cannot be evaluated. This results in the inability to track and identify the sources or magnitude of discrepancies. Which it turn leads to additional irregularities and uncertainties in mapping and land

information systems. These ambiguities result in problems for accurate taxation and assessment. They preclude land records users from taking full advantage of advancements in GIS technology. Inferior data leads to having little more than generalizations about feature locations, permitting, contracting and program eligibility determinations. Emergency services that depend on reliable positional data are also compromised. Essentially, a Geographic Information System constructed without an accurately measured cadastral base can only be close, being neither precise nor accurate. It is a tool with greatly diminished value for planning purposes, limited in its uses by its inaccuracies. State agencies are seeking a comprehensive statewide GIS. It is impossible to construct any type of quality product without accurate boundaries and aligned parcels from county to county.

Allows assessors accurate boundary determinations for equitable taxation

Saves property owners (private, local govt., county, state and federal) money in surveying costs

Saves property owners money in defending ambiguous boundaries

Saves state agencies money in reducing surveying efforts for right-of-way acquisitions

Reduces burden on courts.