

PARCEL MAPS VS. SURVEY MAPS VS. GIS WHAT'S THEIR LEGAL STATUS

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WHAT IS A SURVEY

A Map that is arrived at by engaging in surveying which is the science, art, and profession of determining the positions of points on the surface of the earth and measuring the distances, directions, angles, and elevations between them.

WHAT IS A MAP

A map is a symbolic depiction emphasizing relationships between elements of some space, such as objects, regions, or themes.

Many maps are static, fixed to paper but some others are dynamic or interactive.

The Elements of a Map

- Five Core elements
 - Title - Basic information of purpose
 - Legend - Explanation of symbol; a key
 - Grid - marks used to locate specific locations
 - Direction - Allows orientation & consistency
 - Scale - relationship with the map & reality

Other Helpful Elements

- Color - creates meaning and emphasis
- Signature and date - ID's author & time
- Orientation - expands of direction
- Labels & Symbols - conveys added messages in relation to maps purpose

GIS - WHAT IS IT & HOW IS IT USED

- System or framework for gathering, managing, and analyzing data, that is rooted in the science of geography
- Goal is to gain actionable intelligence from all types of data.
- GIS allows you to visualize data as a map. It allows you to visualize patterns in a meaningful way.

GIS DATA ONCE COLLECTED

- Can be used to make maps that communicate, perform analysis, share information, and solve complex problems.
 - Identify problems
 - Monitor change
 - Manage & respond
 - Forecast
 - Set Priorities
 - Understand Tasks

Land Surveying and GIS

- Uses are limited less
- LiDAR mapping provides tremendous 3D accurate images
- Utilizes the Global Navigation Satellite Systems (GNSS)
- As a combination it is a powerful tool

LEGAL SIGNIFICANCE OF PARCEL MAP VS SURVEY MAP VS GIS MAP

- Depends on the goal or assignment - What are you trying to accomplish
- None of these devices can determine legal ownership or legal land boundaries or rights
- They all have a separate but integrated purpose for the legal system

PARCEL MAPS AND THEIR USE

- A parcel map is generally a governmental tool
- A parcel map, also known as a property map and tax map
- typically built to identify governmental boundaries
- It is a popular data source for government and other industries

Wisconsin Parcel Map Initiative

- <https://maps.sco.wisc.edu/Parcels>
- Uses GIS to accomplish tasks
- Must read the warning on the system
 - *No warranty, expressed or implied, is made regarding accuracy, completeness, or legality of the information herein. The boundaries depicted on this map do not represent the legal ownership boundaries of any property.*

COMPARATIVE USES

- Surveys give you the most information because they have a purpose of being accurate and they use GIS data as well as on site observations and research parcel maps do not
- Surveys show information that a parcel map will not and GIS only has in storage
- Surveys are used in Court to assist Judges

Examples

- Parcel map frontage v Survey map
- USDA acreage determinations v actual acreage
- Lack of accuracy in angles and dimensions in parcel maps causing misunderstanding
- Just look at where roads appear on parcel maps

CASES TO CONSIDER

- New York Case and displacement of 11 acres
- Missouri case - accurate only down to a 50 foot range- on a lake or in downtown St. Louis that is a lot.
- Tennessee - surveyor guilty of negligence for using parcel map
- Vermont surveyor got caught up in developer scheme to defraud

CONCLUSION

- The Key is Purpose
- GIS is only data and data collection it needs a skilled interpreter
- Observation is also essential
- Everything has its place and it is never more than a tool.
- It is never an absolute just useful evidence

QUESTIONS?

THANKS FOR ALLOWING ME TO SPEND TIME
WITH YOU TODAY &

REMEMBER TO KEEP YOUR PRESPECTIVE
CLEAN.

SEE YOU IN PERSON NEXT YEAR.