

MINUTES OF THE HOUSE COMMITTEE ON GOVERNMENTAL ORGANIZATION AND ELECTIONS.

The meeting was called to order by the Chair, Carol Dawson, at 9:00 a.m. on March 13, 1995 in Room 521-S of the Capitol.

All members were present:

Committee staff present: Dennis Hodgins, Legislative Research Department
Carolyn Rampey, Legislative Research Department
Donna Luttjohann, Committee Secretary

Conferees appearing before the committee: Dennis Shreve, KS Society of Land Surveyors

Others attending: See attached list

Chairman Dawson opened the hearing on Sub SB 251 regarding the KS State Plane Coordinate System, resurveying.

Dennis Shreve was recognized by the Chair as a proponent of the bill. He testified that passage of this bill would bring the laws up to date with current techniques being used. See Attachment 1.

After discussion and questions of the Committee were answered, the Chairman closed the public hearing on Sub SB 251.

The Committee's attention was brought to SB 91 regarding advanced voting. The Chairman requested Dennis Hodgins summarize the bill. Mr. Hodgins reviewed the bill and committee discussion took place. Because of a question needing to be answered by the Revisor, the Committee took no further action on the bill.

Chairman Dawson called the Committee's attention to Sub SB 251 regarding the Kansas State Plane Coordinate System. Rep. O'Connor made a motion to recommend favorable passage of the bill and because it was of a non-controversial nature, be placed on the Consent Calendar. It was seconded by Rep. Chronister. The motion carried.

The Chairman adjourned the meeting at 9:30 a.m.

The next meeting is scheduled for Tuesday, March 14, 1995, at 9:00 a.m. in Room 521-S of the Capitol.

GOVERNMENTAL ORGANIZATION AND ELECTIONS
COMMITTEE GUEST LIST

DATE: March 13, 1995

NAME	REPRESENTING
Helen Stephens	KSL
Dennis Shreves	KSL
Mike Kelly	KSL
George Barber	Ks Assembly Engage
BRYAN A. PROFF	SEC. OF STATE



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March 13, 1995

To: House Government and Elections Committee
From: Professor Dennis D. Shreves, PLS
Regional Director
National Society of Professional Surveyors
RE: SB-251

Madam Chairman and members of the committee, my name is Dennis Shreves, and I am the Regional Director for the National Society of Professional Surveyors. I also teach the subject of surveying at Kansas State University - Salina. I am here this morning to urge your support for Senate Bill 251.

The majority of surveys performed by the practicing surveyor cover a relatively small area, and the work can easily be performed using the assumption that the earth is flat. Plane coordinate systems are used for the design and layout of subdivisions, construction staking, traverse plotting, and boundary computations. Surveyors and mappers are normally very familiar with plane coordinate systems and their applications to surveys.

For large scale surveys it becomes necessary to consider the curvature of the earth. This is normally done by means of geodetic surveying in which relative positions are expressed by geodetic coordinates (latitude and longitude). Calculations for this type of survey involve the use of spherical (ellipsoidal) trigonometry and tend to be tedious and involved, even with a computer. For the practicing surveyor geodetic calculations and surveying techniques require more effort than they tend to be worth.

To solve the problem of working over large areas, the State Plane Coordinate System was developed by the US Coast and Geodetic Survey (today the National Geodetic Survey). This system eliminates the need for an extensive knowledge of geodesy. Using the state plane coordinate system computations can be made using standard coordinate geometry formulas. The USGS developed the SPCS for each state, beginning with North Carolina in 1933.

HOUSE GOVERNMENTAL ORGANIZATION
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Attachment 1

The State Plane Coordinate System provides a common reference datum for horizontal control over large areas. This system can easily be adopted by all surveyors and mappers. Currently, in any given locality we tend to find many surveys each using assumed and unrelated coordinate systems. Its easy to imagine the benefits that could be derived if all surveyors and mappers used the same system. Highway construction projects could be tied to property surveys; mapping projects could be related to subdivision work; utility companies could locate their underground services with the same system used by counties, cities and the state. The list goes on. Several municipalities and agencies already require the use of this system.

A list of reasons for adopting the use of state plane coordinates would include the following:

- 1) These systems provide surveyors and mappers with a network of control established by geodetic surveying. These points can be used for the coordination of surveys, checking the work, and the reestablishment of lost points.
- 2) Once state plane coordinates are applied to a property corner, that corner can never be lost. In effect, it has been keyed in to the network established by the National Geodetic Survey.
- 3) Long traverses can close on distant control stations that use the same system.
- 4) Independent surveys using the same coordinate system can easily be tied to each other. If, for example, a public utility used state plane coordinates to locate its pipe lines any other government or private agency using the same system would have little difficulty locating those same lines.
- 5) The use of grid north has several distinct advantages over geodetic north, not the least of which is that its easier for clients and the non-surveying public to understand.
- 6) In general, the use of coordinate geometry for solving mathematical applications in surveying and mapping is more efficient than using traditional trigonometric techniques.

Forty-six states have enacted statutes that legally adopt and define the name of the State Plane Coordinate System used within their borders. In those states, land descriptions are possible which refer to the system by name, and call out the coordinates of specific points within the parcel.

Thank you for allowing me to address you regarding this bill.