

US LAND SURVEY, An Introduction

The United States is divided by north-South and East-West lines to form Townships six miles square (six miles on each side). These Townships are further divided into 36 sections, each containing (as nearly as possible) 640 acres. Parts of Canada have a similar subdivision.

In the lower 48 states, there are 31 “Initial Points” for land survey, representing the intersection of an east-west “Base Line” with a north-south “Principal Meridian”. Every 24 miles north and south of the Base Line, there are “Standard Parallels”; e.g., First Standard Parallel North, etc. Approximately every 24 miles east and west of the Principal Meridian, there are “Guide Meridians”; e.g., First Guide Meridian East, etc. Due to the curvature of the earth, these Guide Meridians tend to converge as they get closer to the north pole. At the Base Line and at each Standard Parallel, these Guide Meridians jog (or are offset) a bit to the east or west in order to maintain approximately the same area for subdivisions.

Each of the following blocks represents one township. The Base Line is between T1N and T1S. The Principal Meridian is between R1W and R1E. This is the Initial Point for surveys in the area.

Principal Meridian		First Guide Meridian East					
	T5N						First Standard Parallel North
	T4N						
	T3N						
	T2N						
R1W	T1N/R1E	R2E	R3E	R4E	R5E		
	T1S						
	T2S						

Townships are divided into 36 sections; approximately one mile square, and numbered as shown below. The grid below represents 3 townships wide and 2 high.

6	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36
6	5	4	3	2	1	6	5	4	3	2	1	6	5	4	3	2	1
7	8	9	10	11	12	7	8	9	10	11	12	7	8	9	10	11	12
18	17	16	15	14	13	18	17	16	15	14	13	18	17	16	15	14	13
19	20	21	22	23	24	19	20	21	22	23	24	19	20	21	22	23	24
30	29	28	27	26	25	30	29	28	27	26	25	30	29	28	27	26	25
31	32	33	34	35	36	31	32	33	34	35	36	31	32	33	34	35	36

Section subdivisions are designated as shown at the right: (e.g., read the center top block as W 1/2 of the NE 1/4).

A more complete designation is: W 1/2 NE 1/4, section 24, T3N, R16W, SBBM.

This is read as West 1/2 of the NE 1/4 of section 24, Township 3 North, Range 16 West.

The name of the Initial Point for surveys may be added at the end of the above designation.

NW 1/4 (160 acres)		W 1/2 NE 1/4 (80 acres)		E 1/2 E 1/2 (160 acres)
NW 1/4 SW1/4 (40 acres)	NE 1/4 SW 1/4 (40 acres)	NW 1/4 SE1/4 (40 acres)		
S 1/2 SW 1/4 (80 acres)		SW 1/4 SE1/4 (40 acres)		