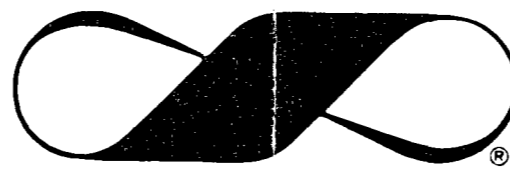


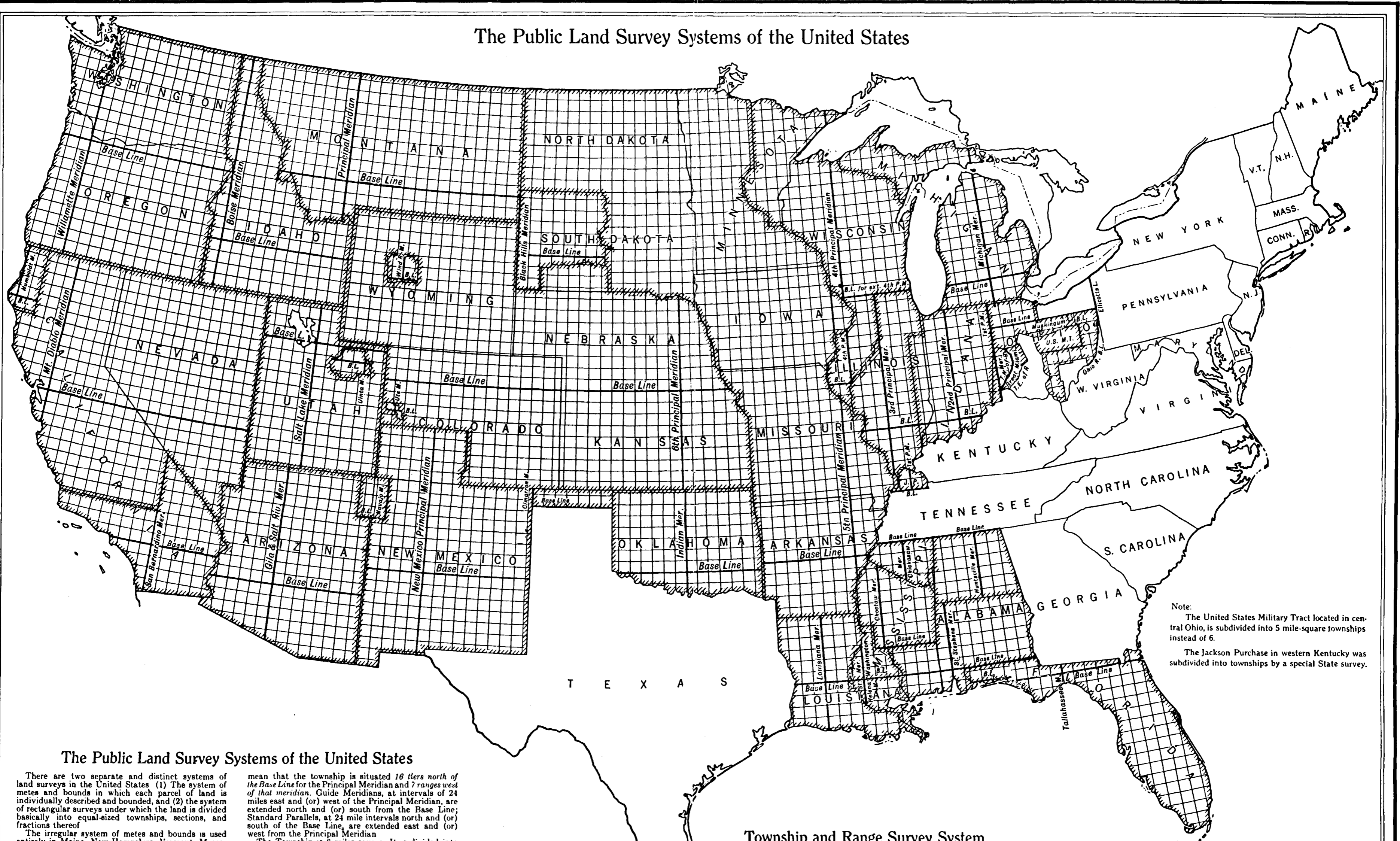
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The Public Land Survey Systems of the United States



The Public Land Survey Systems of the United States

There are two separate and distinct systems of land surveys in the United States (1) The system of metes and bounds in which each parcel of land is individually described and bounded, and (2) the system of rectangular surveys under which the land is divided basically into equal-sized townships, sections, and fractions thereof.

The irregular system of metes and bounds is used entirely in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Pennsylvania, New Jersey, Maryland, Delaware, Virginia, North Carolina, South Carolina, Georgia, Tennessee, Kentucky, Texas, and parts of Ohio. Each parcel of land varies in size, is described independently, and is not tied in to any system of base lines.

The system of rectangular surveys was inaugurated in 1784 and the laws governing its establishment have, with various modifications, been applied to all of the United States with the exception of the states listed above. Under this system the lands are divided into "townships," 36 miles square, which are related to base lines established by the federal government. The base lines running north and south are known as "Principal Meridians" while the east and west base lines are called simply "Base Lines." The township numbers east or west of the Principal Meridians are designated as ranges whereas the numbers north and south of the Base Line are tiers. Thus, the description of a township as "Township 16 North, Range 7 West" would

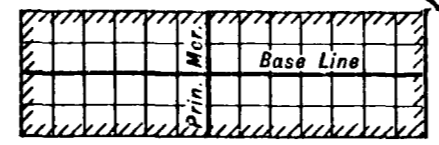
mean that the township is situated 16 tiers north of the Base Line for the Principal Meridian and 7 ranges west of that meridian. Guide Meridians, at intervals of 24 miles east and (or) west of the Principal Meridian, are extended north and (or) south from the Base Line; Standard Parallels, at 24 mile intervals north and (or) south of the Base Line, are extended east and (or) west from the Principal Meridian.

The Township is 36 miles square. It is divided into 36 square-mile "sections" of 360 acres each which may be divided and subdivided as desired. The diagrams herewith show the system of numbering the sections and the usual method of subdividing them.

Example: A piece of land is described as "the NW 1/4 of the SE 1/4 of section 14, T 6 N., R 11 W., 6th Prin Mer." The translation is "the northwest quarter of the southeast quarter of section 14 in township 6 north and range 11 west of the 6th Principal Meridian." By referring to the map the approximate location of this 40-acre tract can easily be determined.

Irregular tracts of land are, of course, also described by metes and bounds within the rectangular survey system. They are, however, tied in to the monuments established under the rectangular system.

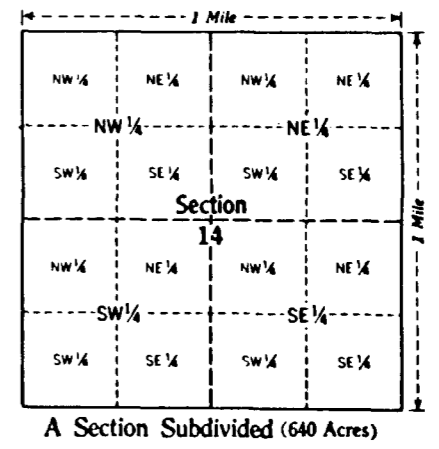
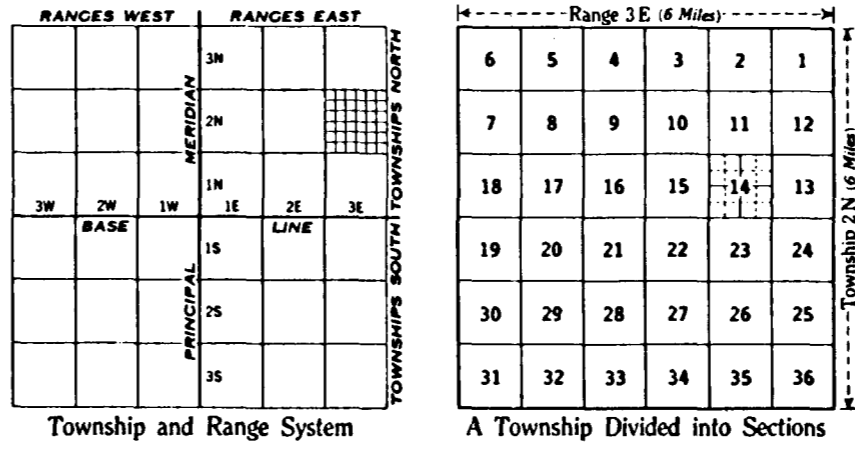
For detailed information on the public land survey system in the United States see the "Manual of Instruction for the Survey of the Public Lands of the United States" issued by the Bureau of Land Management of the Department of the Interior.



Each square on this map represents 16 Townships and is 4 Townships or 24 miles square.

Areas in which old Metes and Bounds Systems are used are left blank.

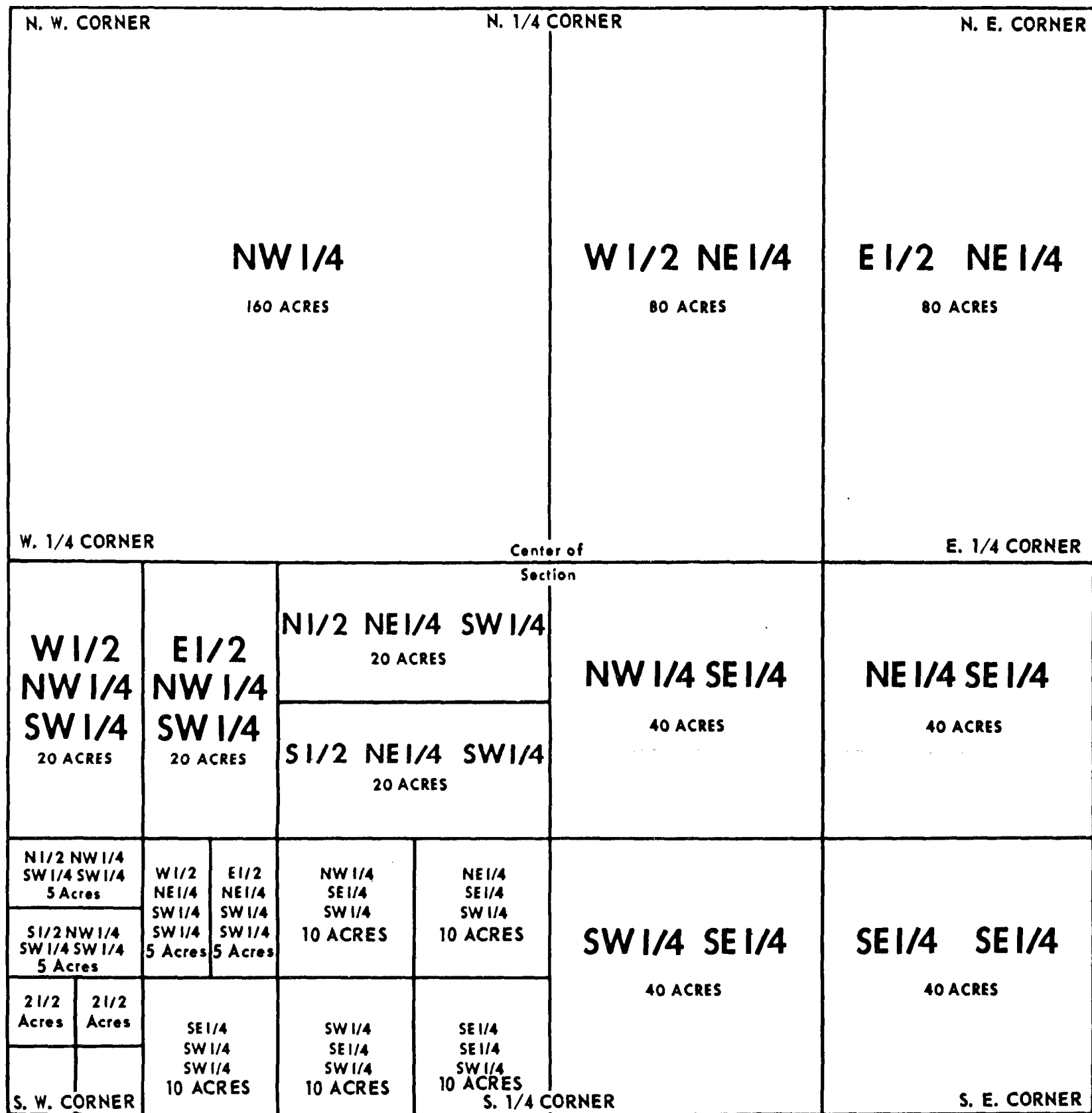
Township and Range Survey System



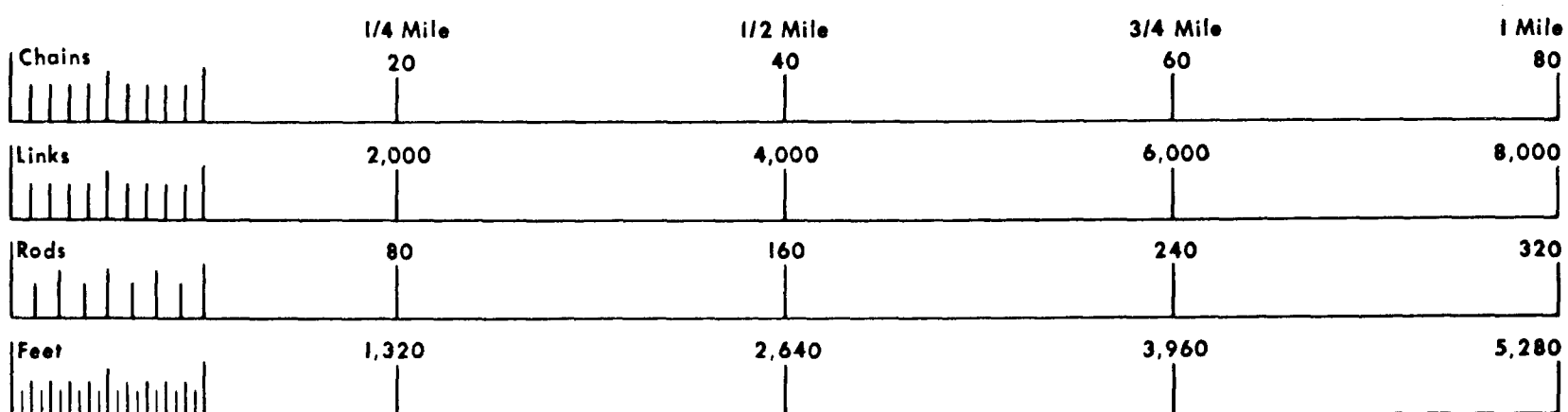
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A SECTION OF LAND — 640 ACRES

Chains Rods Feet
Quarter Sections and Subdivisions Thereof



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Always on rectangular survey descriptions, work from end of description back to the beginning. Example:

1 Town and Range 2 Sec. Number 3 1/4 section 4 1/4 sec. of 1/4 sec. thence into halves or quarters to beginning 5&6 7

7 South 165 feet of 6 S 1/2 5 S 1/4 4 SE 1/4 3 NE 1/4 2 Section 8 1 Town 7 North, Range 7 East

5 Acres 10 Acres 20 Acres 40 Acres 160 Acres 640 Acres

The preferred order in locating quarter sections is counter-clockwise, North East quarter, North West quarter, South West quarter, and South East quarter. If parts of the quarter sections are to be described, the same order should be observed.

UNITS OF LENGTH							
Units	Inches	Links	Feet	Yards	Rods	Chains	Miles
1 inch =	1	0.126263	0.0833333	0.0277778	0.00505051	0.00126263	0.0000157828
1 link =	7.92	1	0.66	0.22	0.04	0.01	0.000125
1 foot =	12	1.515152	1	0.333333	0.0606061	0.0151515	0.0001893939
1 yard =	36	4.54545	3	1	0.181818	0.0454545	0.000568182
1 rod =	198	25	16.5	5.5	1	0.25	0.003125
1 chain =	792	100	66	22	4	1	0.0125
1 mile =	63,360	8,000	5,280	1,760	320	80	1

AREA MEASURE				GUNTER'S OR SURVEYOR'S CHAIN MEASURE			
144 square inches =	1 square foot	1 acre =	43,560 square feet	7.92 inches =	1 link	4 rods =	66 feet or 1 chain
9 square feet =	1 square yard	640 acres =	1 square mile	100 links =	1 chain	80 chains =	1 statute mile
30 1/4 square yards =	1 square rod	1 mile square =	1 section	4 rods =	66 feet or 1 chain		
1 square rod =	272.25 square feet	6 miles square =	1 township	80 chains =	1 statute mile		
160 square rods =	1 acre	36 sections =	36 square miles				
1 acre =	4,840 square yards						

Conversion of Chains to Rods and Feet

Chains	Rods	Feet	Chains	Rods	Feet	Chains	Rods	Feet	Links	Feet	Inches	Links	Feet	Inches	Links	Feet	Inches
1	4	16.5	14	56	924.	27	108	1782.	2	1	7.92	34	22	5.28	67	44	2.64
2	8	33.	57	940.5	1798.5	3	12	354.	3	1	3.84	35	23	1.20	68	44	10.56
3	12	49.5	58	957.	1815.	4	16	528.	4	2	7.68	36	23	9.12	69	45	6.48
4	16	66.	59	973.5	1831.5	5	20	702.	5	3	11.52	37	24	5.04	70	46	2.40
5	20	82.5	60	990.	1848.	6	24	876.	6	3	11.52	38	25	0.96	71	46	10.32
6	24	99.	61	1006.5	1864.5	7	28	1050.	7	4	7.44	39	25	8.88	72	47	6.24
7	28	115.5	62	1023.	1881.	8	32	1224.	8	5	3.36	40	26	4.80	73	48	2.16
8	32	132.	63	1039.5	1897.5	9	36	1398.	9	5	11.28	41	27	0.72	74	48	10.08
9	36	148.5	64	1056.	1914.	10	40	1572.	10	6	7.20	42	27	8.64	75	49	6.00
10	40	165.	65	1072.5	1930.5	11	44	1746.	11	7	3.12	43	28	4.56	76	50	1.92
11	44	181.5	66	1089.	1947.	12	48	1920.	12	7	11.04	44	29	0.48	77	50	9.84
12	48	198.	67	1105.5	1963.5	13	52	2094.	13	8	6.96	45	29	8.40	78	51	5.76
13	52	214.5	68	1122.	1980.	14	56	2268.	14	9	2.88	46	30	4.32	79	52	1.68
14	56	231.	69	1138.5	1996.5	15	60	2442.	15	9	10.80	47	31	0.24	80	52	9.60
15	60	247.5	70	1155.	2013.	16	64	2616.	16	10	6.72	48	31	8.16	81	53	5.52
16	64	264.	71	1171.5	2029.5	17	68	2790.	17	11	2.64	49	32	4.08	82	54	1.44
17	68	280.5	72	1188.	2046.	18	72	2964.	18	11	10.56	50	33	0.00	83	54	9.36
18	72	297.	73	1204.5	2062.5	19	76	3138.	19	12	6.48	51	33	7.92	84	55	5.28
19	76	313.5	74	1221.	2079.	20	80	3312.	20	13	2.40	52	34	3.84	85	56	1.20
20	80	330.	75	1237.5	2095.5	21	84	3486.	21	13	10.32	53	34	11.76	86	56	9.12
21	84	346.5	76	1254.	2112.	22	88	3660.	22	14	6.24	54	35	7.68	87	57	5.04
22	88	363.	77	1270.5	2128.5	23	92	3834.	23	14	6.24	55	36	3.60	88	58	0.96
23	92	379.5	78	1287.	2145.	24	96	4008.	24	15	2.16	56	36	11.52	89	58	8.88
24	96	396.	79	1303.5	2161.5	25	100	4182.	25	15	10.08	57	37	7.44	90	59	4.80
25	100	412.5	80	1320.	2178.	26	104	4356.	26	16	6.00	58	38	3.36	91	60	0.72
26	104	429.	81	1336.5	2194.5	27	108	4530.	27	17	1.92	59	38	11.28	92	60	8.64
27	108	445.5	82	1353.	2211.	28	112	4704.	28	17	9.84	60	39	7.20	93	61	4.56
28	112	462.	83	1369.5	2227.5	29	116	4878.	29	18	5.76	61	40	3.12	94	62	0.48
29	116	478.5	84	1386.	2244.	30	120	5052.	30	19	1.68	62	40	11.04	95	62	8.40
30	120	495.	85	1402.5	2260.5	31	124	5226.	31	19	9.60	63	41	6.96	96	63	4.32
31	124	511.5	86	1419.	2277.	32	128	5400.	32	20	5.52	64	42	2.88	97	64	0.24
32	128	528.	87	1435.5	2293.5	33	132	5574.	33	21	1.44	65	42	10.80	98	65	4.08
33	132	544.5	88	1452.	2310.	34	136	5748.	34	21	9.36	66	43	6.72	100	66	0.00
34	136	561.	89	1468.5	2326.5												
35	140	577.5	90	1485.	2343.												
36	144	594.	91	1501.5	2359.5												
37	148	610.5	92	1518.	2376.												
38	152	627.	93	1534.5	2392.5												
39	156	643.5	94	1551.	2409.												
40	160	660.	95	1567.5	2425.5												
41	164	676.5	96	1584.	2442.												
42	168	693.	97	1600.5	2458.5												
43	172	709.5	98	1617.	2475.												
44	176	726.	99	1633.5	2491.5												
45	180	742.5	100	1650.	2508.												
46	184	759.	101	1666.5	2524.5												
47	188	775.5	102	1683.	2541.												
48	192	792.	103	1699.5	2557.5												
49	196	808.5	104	1716.	2574.												
50	200	825.	105	1732.5	2590.5												
51	204	841.5	106	1749.	2607.												
52	208	858.	107	1765.5	2623.5												
53	212	874.5			2640.												
54	216	891.															
55	220	907.5															

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