

Waukesha County

Wisconsin County Coordinate System

Projection: Transverse Mercator

Design Elevation: 274.321 meters (900 feet) [1200 high, 720 low]

Geoidal Separation: - 34.45 meters
Origin Longitude: 88° 13' 30"

Origin Longitude: 88° 13' 30" Origin Latitude: 42° 34' 10"

False Easting: 208,788.4176 meters (685,000 feet)

False Northing: 0.00 meters (0.00 feet)

Scale Factor: 0.999997

Approximate Ground to Grid Ratios

Rural (worst)	1:63,000	T7N, R18E, Sec 32, high point
Urban	1:130,000	Waukesha
	1:185,000	Brookfield, Menominee Falls
	1:126,000	Elm Grove
	1:280,000	Oconomowoc, Mukwonago
	1:110,000	Hartland

Approximate western most coordinate (X) = 600,000 feet Approximate southern most coordinate (Y) = 100,000 feet

Design Comments:

Waukesha County has a general rise in elevation from east to west. The highest point in the county is west of center. The central meridian was shifted east of center to compensate for the general elevation rise. The projection optimizes urban areas and transportation corridors rather than optimizing all elevations.

(Note: All feet units for the Wisconsin County Coordinate System are U.S. Survey Foot. Please see further discussion of this issue on page 6 of the Summary of Terms section of this handbook.)