



Shaded Relief of Carroll County, Illinois

Christopher S. McGarry

1997

Illinois State Geological Survey

William W. Shilts, Chief
Champaign

State of Illinois
Department of Natural Resources

R2E

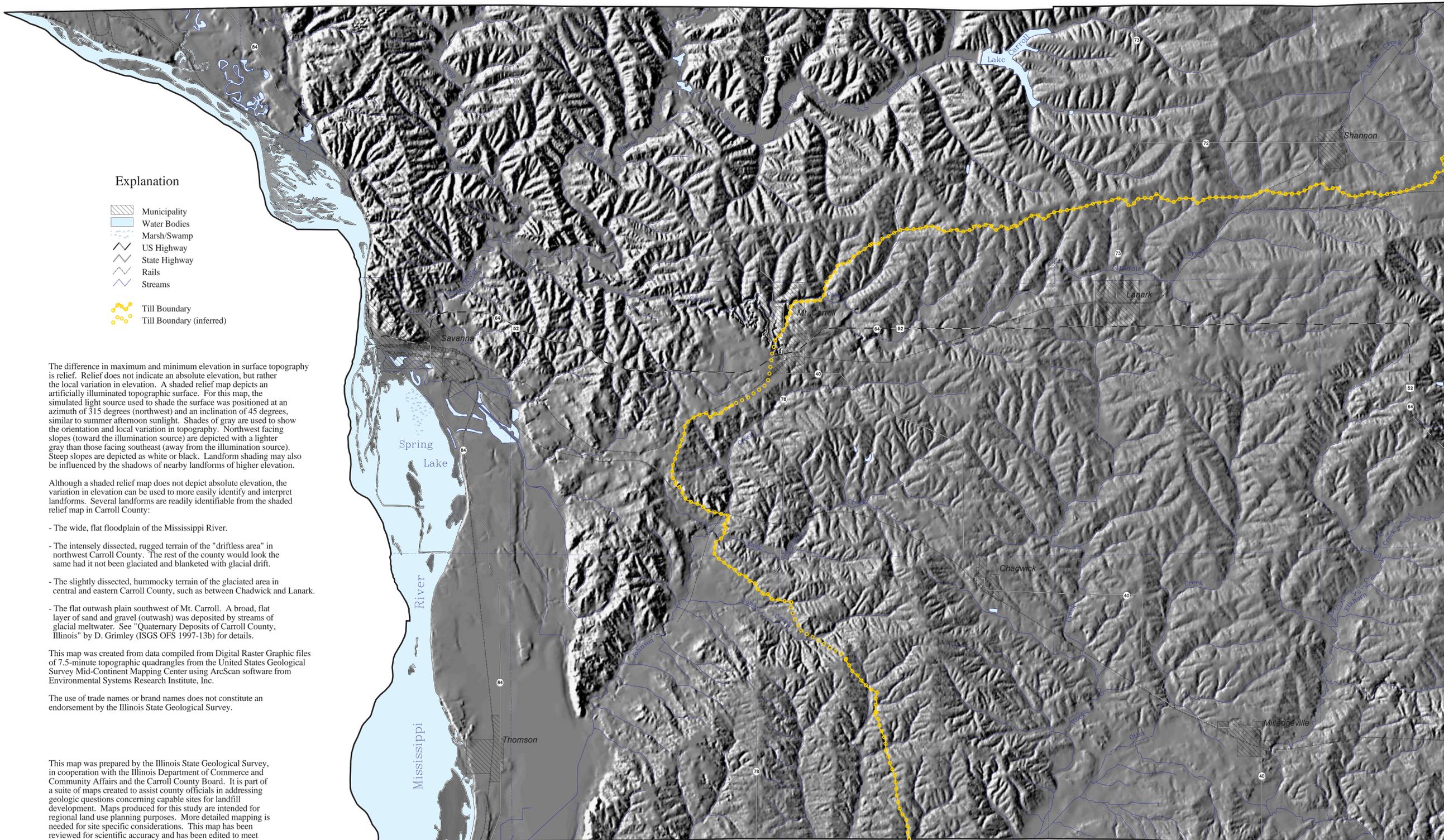
R3E

R4E

R5E

R6E

R7E



Explanation

- Municipality
- Water Bodies
- Marsh/Swamp
- US Highway
- State Highway
- Rails
- Streams
- Till Boundary
- Till Boundary (inferred)

The difference in maximum and minimum elevation in surface topography is relief. Relief does not indicate an absolute elevation, but rather the local variation in elevation. A shaded relief map depicts an artificially illuminated topographic surface. For this map, the simulated light source used to shade the surface was positioned at an azimuth of 315 degrees (northwest) and an inclination of 45 degrees, similar to summer afternoon sunlight. Shades of gray are used to show the orientation and local variation in topography. Northwest facing slopes (toward the illumination source) are depicted with a lighter gray than those facing southeast (away from the illumination source). Steep slopes are depicted as white or black. Landform shading may also be influenced by the shadows of nearby landforms of higher elevation.

Although a shaded relief map does not depict absolute elevation, the variation in elevation can be used to more easily identify and interpret landforms. Several landforms are readily identifiable from the shaded relief map in Carroll County:

- The wide, flat floodplain of the Mississippi River.
- The intensely dissected, rugged terrain of the "driftless area" in northwest Carroll County. The rest of the county would look the same had it not been glaciated and blanketed with glacial drift.
- The slightly dissected, hummocky terrain of the glaciated area in central and eastern Carroll County, such as between Chadwick and Lanark.
- The flat outwash plain southwest of Mt. Carroll. A broad, flat layer of sand and gravel (outwash) was deposited by streams of glacial meltwater. See "Quaternary Deposits of Carroll County, Illinois" by D. Grimley (ISGS OFS 1997-13b) for details.

This map was created from data compiled from Digital Raster Graphic files of 7.5-minute topographic quadrangles from the United States Geological Survey Mid-Centennial Mapping Center using ArcScan software from Environmental Systems Research Institute, Inc.

The use of trade names or brand names does not constitute an endorsement by the Illinois State Geological Survey.

This map was prepared by the Illinois State Geological Survey, in cooperation with the Illinois Department of Commerce and Community Affairs and the Carroll County Board. It is part of a suite of maps created to assist county officials in addressing geologic questions concerning capable sites for landfill development. Maps produced for this study are intended for regional land use planning purposes. More detailed mapping is needed for site specific considerations. This map has been reviewed for scientific accuracy and has been edited to meet the quality standards of maps in the ISGS Map Series.



Scale 1:62,500
1 inch equals approximately 1 mile
0 1 2 3 4 Miles
0 1 2 3 4 5 Kilometers
Lambert Conformal Conic Projection



T25N

T24N

T23N