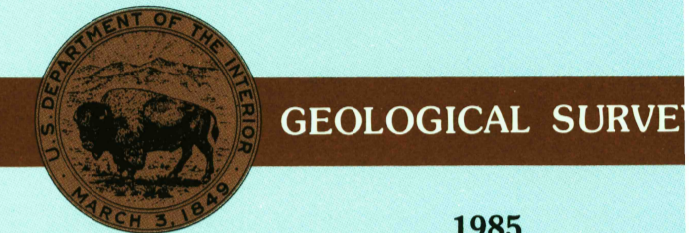




30 X 60 MINUTE QUADRANGLE SHOWING

- Elevations in meters
- Highways, roads and other manmade structures
- Water features
- Woodland areas
- Geographic names



Produced by the United States Geological Survey  
 Compiled from USGS 1:24 000-scale topographic maps dated 1959-1981. Planimetry revised from aerial photographs taken 1983 and other source data. Revised information not field checked. Map edited 1985.  
 Projection and 10 000-meter grid, zone 16, Universal Transverse Mercator  
 25 000-foot grid ticks based on Michigan coordinate system, south zone, Ohio coordinate system, north zone, and Indiana coordinate system, east zone 1927 North American Datum  
 To place on the predicted North American Datum 1983, move the projection lines 3 meters west  
 There may be private inholdings within the boundaries of the National or State reservations shown on this map

NATIONAL GEODETIC VERTICAL DATUM OF 1929

ELEVATIONS SHOWN TO THE NEAREST METER

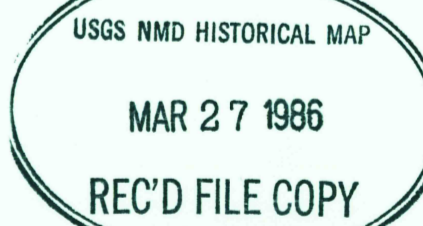
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS		
Meters	Feet	1	2	3	4	5
2	6.5617	1	2	3	4	5
4	13.1234	6	7	8		
6	19.6851					
8	26.2468					
10	32.8085					

To convert meters to feet multiply by 3.2808  
 To convert feet to meters multiply by 0.3048

UTM grid convergence (GM) and 1983 magnetic declination (MD) at center of map  
 Diagram is approximate

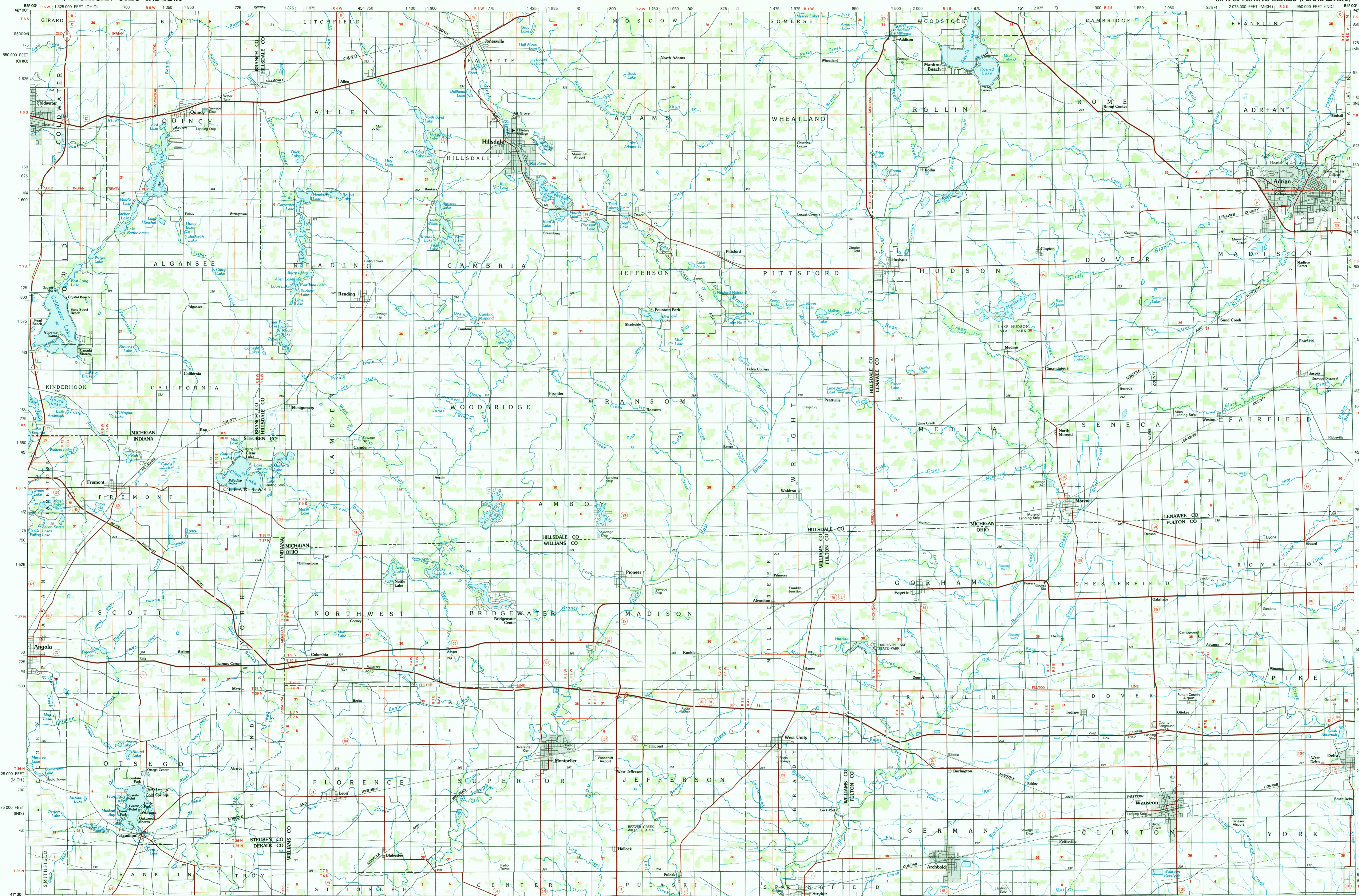
FOR SALE BY U.S. GEOLOGICAL SURVEY RESTON, VIRGINIA 22092



Topographic Map Symbols

Primary highway, hard surface	
Secondary highway, hard surface	
Light duty road, principal street, hard or improved surface	
Other road or street; trail	
Route marker: Interstate; U.S. State	
Railroad: standard gage; narrow gage	
Bridge: overpass; underpass	
Tunnel: road; railroad	
Built up area; locality; elevation	
Airport; landing field; landing strip	
National boundary	
State boundary	
County boundary	
National or State reservation boundary	
Land grant boundary	
U.S. public lands survey; range, township; section	
Range, township; section line; protracted	
Power transmission line; pipeline	
Dam; dam with lock	
Cemetery; building	
Windmill; water well; spring	
Mine shaft; adit or cave; mine, quarry; gravel pit	
Campground; picnic area; U.S. location monument	
Ruins; cliff dwelling	
Distorated surface; strip mine, lava, sand	
Contours: index; intermediate; supplementary	
Bathymetric contours: index; intermediate	
Stream, lake: perennial; intermittent	
Rapids, large and small; falls, large and small	
Area to be submerged; marsh, swam	
Land subject to controlled inundation; woodland	
Scrub; mangrove	
Orchard; vineyard	

A pamphlet describing topographic maps is available on request



SCALE 1:100 000

