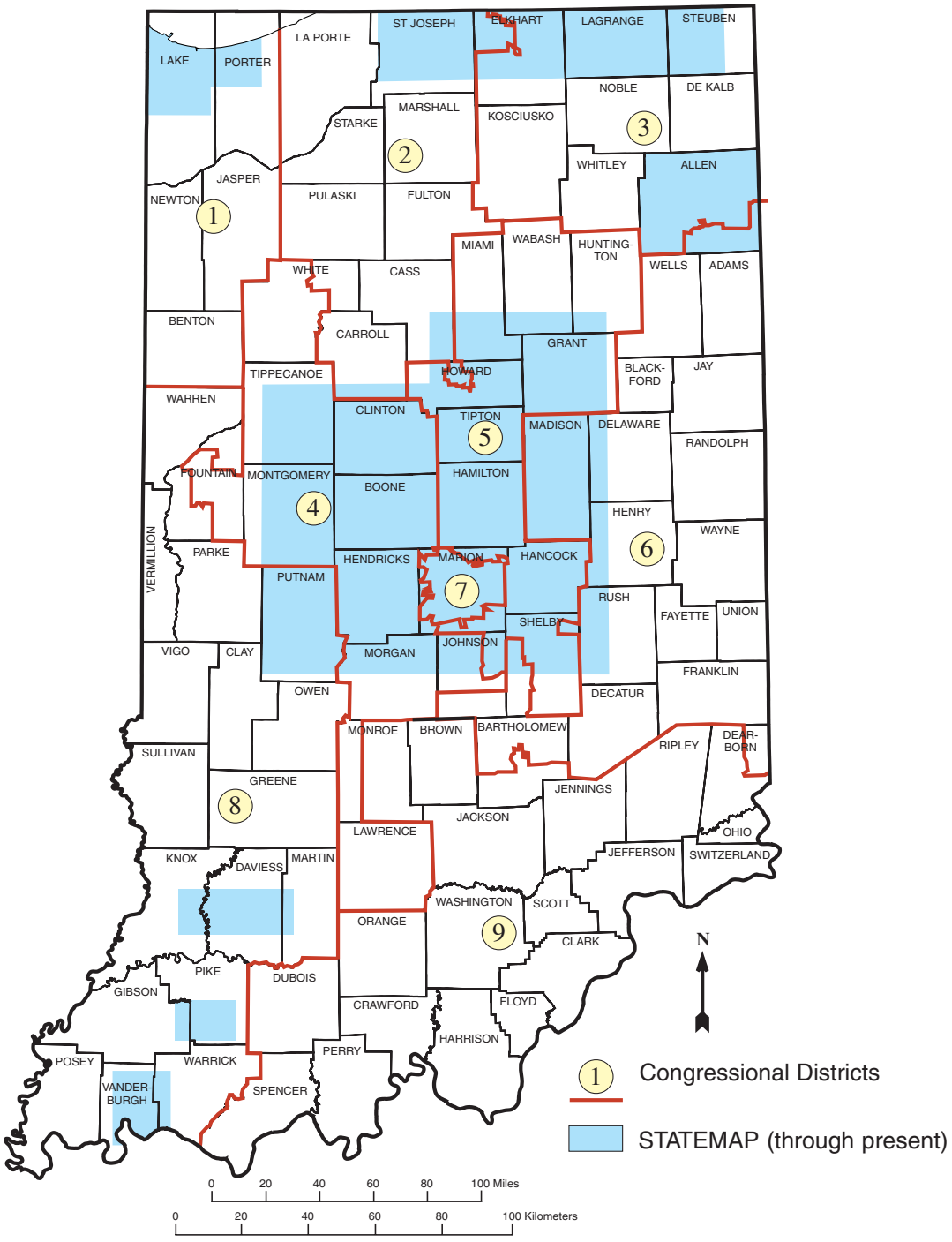
Association of American State Geologists

United States Geological Survey

National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping

INDIANA



Contact information

Indiana Geological Survey
State Geologist: John C. Steinmetz (812/855-5067)
STATEMAP Contact: Steve Brown (219/980-6983)
http://igs.indiana.edu

USGS Geologic Mapping Program Office
Program Coordinator: Peter T. Lyttle (703/648-6943)
Assoc. Program Coordinator: Randall Orndorff (703/648-4316)
http://ncgmp.usgs.gov/

SUMMARY OF STATEMAP
GEOLOGIC MAPPING PROGRAM IN INDIANA

Federal Fiscal Year	Project Title	Federal Dollars	State Dollars	Total Project Dollars
93	Glacial Terrain Map: Chicago 30' x 60' quadrangle, Phase 1: scales 1:100,000 and 1:24,000	$24,426	$64,160	$88,586
94	Glacial Terrain Map, Chicago 30' x 60' quadrangle, Phase 2: scales 1:100,000 and 1:24,000	57,938	79,418	137,356
	Quaternary–Materials Terrain Map, Evansville Metro quadrangles, Phase 1: scale 1:24,000	30,000	50,079	80,079
95	Glacial Terrain Map, Dyer, Crown Point, and Saint John quadrangles: scale 1:24,000	35,000	53,203	88,203
	Quaternary - Materials Terrain Map of Evansville Metro quadrangles: Newburgh and Daylight 7.5-min: scale 1:24,000	15,000	19,429	34,429
96	Glacial Terrain Maps: Shipshewana, Topeka, Middlebury, Millersburg, and Indiana portion of the Sturgis 7.5-min quadrangles: scale 1:24,000	51,446	51,673	103,119
	Geological Terrain Map of the Evansville Metropolitan quadrangles: the Daylight Quadrangle: scale 1:24,000	16,771	18,787	35,558
	Systems Mapping of Bedrock and Nonlithified Deposits in Daviess and Knox Counties, Vincennes 30' x 60' quadrangle: Systems Mapping of the Loogootee and Montgomery 7.5-min quadrangles: scales 1:100,000 and 1:24,000	52,135	85,433	137,568
	Digital Conversion of Maps and Report of Allen County.	12,290	13,191	25,481
97	Glacial Terrain Maps of Mongo and Wolcottville 7.5-min quadrangles, LaGrange and Elkhart Counties: scale 1:24,000	44,827	45,101	89,928
	Systems Mapping of Bedrock and Nonlithified Overburden in the Washington and Wheatland 7.5-min quadrangles, Daviess and Knox Counties: scale 1:24,000	62,586	78,891	141,477
98	Glacial Terrain Maps of the Middlebury, Millersburg, Bristol, Goshen, Stroh, Orland, and Indiana Part of the Bronson South 7.5-min quadrangles, LaGrange, Steuben, and Elkhart Counties: scale 1:24,000	56,045	57,008	113,053
	Systems Mapping of Bedrock and Nonlithified Overburden in the Oakland City and Augusta 7.5-min Quadrangles, Pike County: scale 1:24,000	16,261	54,771	71,032
99	Geological Mapping Michiana Corridor: scale 1:24,000	62,950	63,052	126,002
	Geological Mapping Indiana Heartland (Central): scales 1:100,000 and 1:24,000	30,160	30,449	60,609
	Geological Mapping Indiana Heartland (Northeast): scale 1:24,000	16,890	17,163	34,053
00	2000 STATEMAP Indiana Geol. Survey: New Mapping, Michiana Corridor: Scale 1:24,000	63,775	64,502	128,277
	2000 STATEMAP Indiana Geol. Survey: New Mapping, Indiana Heartland (central); scales 1:100,000 and 1:24,000	34,990	35,732	70,722
	2000 STATEMAP Indiana Geological Survey: New Mapping, Indiana Heartland (northeast): scale 1:24,000	40,807	41,023	81,830
01	2001 STATEMAP Indiana Heartland: scale 1:100,000	197,152	197,366	394,518
	Entering Indiana geoscience map references in the National Geologic Map Database	6,000	6,000	12,000
02	2002 STATEMAP Indiana Heartland: scale 1:100,000	227,334	227,334	454,668
03	2003 STATEMAP Central Indiana: scale 1:100,000	147,329	147,887	295,216
	TOTALS	**$1,302,112**	**$1,501,652**	**$2,803,764**

Geologic Mapping: A STATE NEED

The Indiana Geological Survey (IGS) STATEMAP program addresses a variety of societal, scientific, and operational needs within the context of the IGS long-term mapping plan. Mapping priorities are determined on the basis of several criteria, including the practical need to concentrate mapping efforts in corridors and centers of growth, the distribution of completed and in-progress work, the availability of data, opportunities for inter-agency cooperation, and opportunities for education and outreach. Through their mapping efforts, IGS staff hope to promote broad-based geological understanding amongst our citizens, our most important customers, and bridge the gap between the highly technical nature of science and the need for general earth information.

How are geologic maps used?

The primary use of geologic maps and associated products is education. These products bring to the *common* table a combination of the most up-to-date data, interpretation, and illustration. Their intent is to be a cornerstone of the public forum on land-use issues.

Geologic-map products are utilized for making informed land-use decisions involving:

- Geologic framework of aquifers and their recharge and discharge areas
- Ground-water resources: location, amount, protection
- Mineral and energy resources and the environmental impact of their extraction
- Local and regional sensitivity to ground-water contamination: best-management practices, local septic-system issues, solid- and hazardous-wastes disposal
- Earthquake hazards and mitigation

Advances in technology now allow geologists to access, view, and analyze data in ways never before possible. Geographic Information Systems (GIS) and computer databases permit STATEMAP-sponsored geologists to make customized, user-friendly products for end users. Moreover, modern geologic maps are digitally stored for rapid ease of manipulation at minimal cost. These methods of data handling and manipulation in themselves create new mapping challenges and opportunities.

Overall, the intent of modern geologic maps is to permit the citizens of the state to raise the quality of their lives through informed decisions directed toward the wise use of the land.