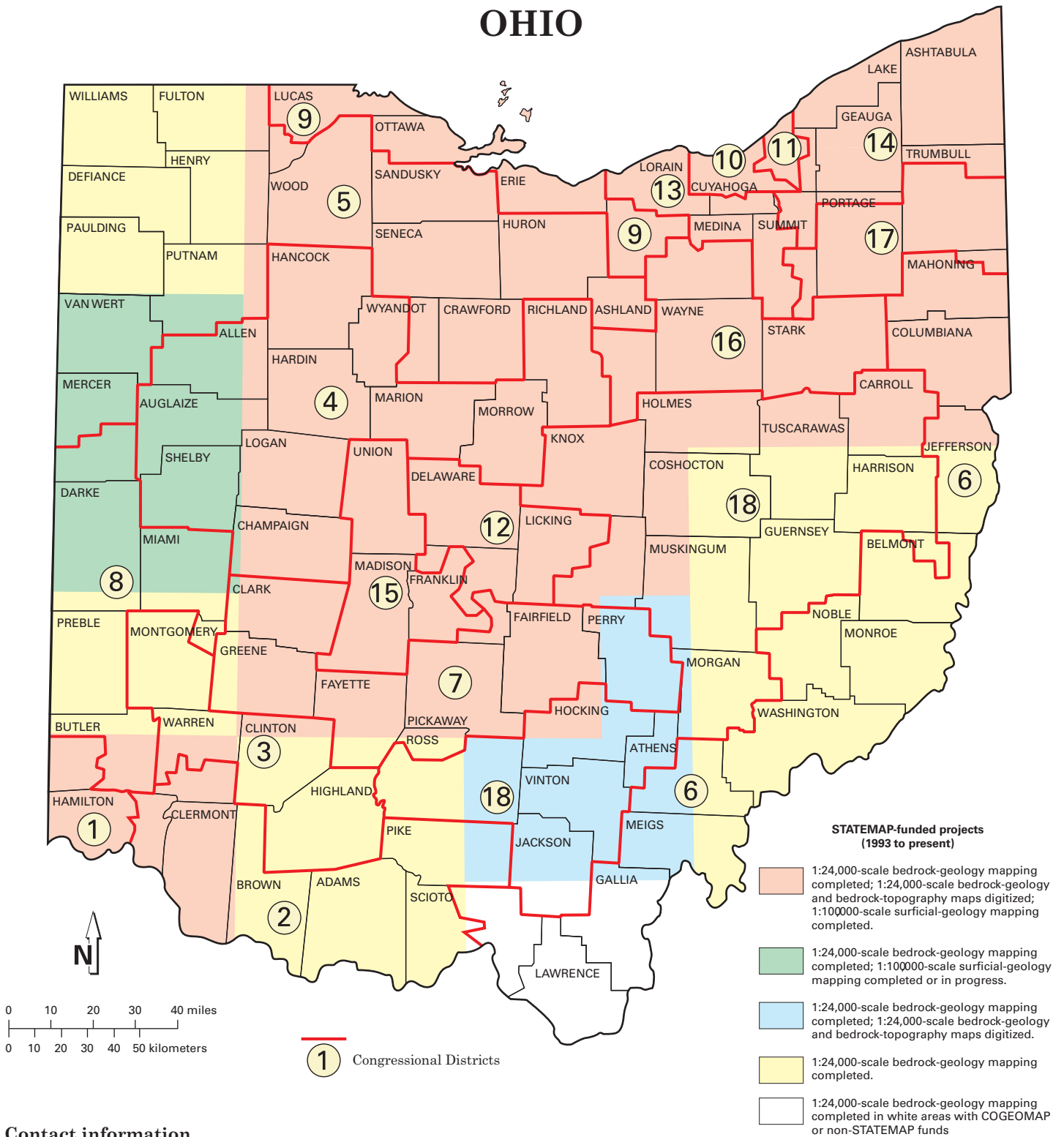


National Cooperative Geologic Mapping Program

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

OHIO



Contact information

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Summary of STATEMAP Geologic Mapping Program in Ohio

Federal Fiscal Year	Project Title, Scale	State Dollars	Federal Dollars	Total Project Dollars
93	Bedrock geology of 247 7.5-minute quadrangles in northwestern and southwestern Ohio, 1:24,000	\$239,071	\$109,874	\$348,945
94	Bedrock geology of 168 7.5-minute quadrangles in north- and south-central Ohio, 1:24,000	\$298,577	\$105,000	\$403,577
95	Bedrock geology of 124 7.5-minute quadrangles in northeastern Ohio, 1:24,000	\$99,910	\$40,000	\$139,910
96	Bedrock geology of 112 7.5-minute quadrangles in southeastern Ohio, 1:24,000	\$86,155	\$86,155	\$172,310
96	Digitization of bedrock-geology and bedrock-topography maps for north- and south-central Ohio	\$47,026	\$47,026	\$94,052
97	Surficial geology of the Cincinnati and Falmouth 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$118,316	\$112,249	\$230,565
98	Surficial geology of the Lorain and Put-in-Bay 30 x 60 minute quadrangles, 1:100,000	\$84,815	\$84,815	\$169,630
99	Surficial geology of the Cleveland South 30 x 60 minute quadrangle, 1:100,000	\$103,803	\$103,802	\$207,605
00	Surficial geology of the Canton and East Liverpool 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$99,877	\$99,877	\$199,754
01	Surficial geology of the Newark 30 x 60 minute quadrangle, 1:100,000	\$99,798	\$99,798	\$199,596
02	Surficial geology of the western portion of the Lancaster 30 x 60 minute quadrangle, 1:100,000	\$133,614	\$74,730	\$208,344
03	Surficial geology of a portion of the Springfield 30 x 60 minute quadrangle, 1:100,000	\$95,990	\$95,990	\$191,980
04	Surficial geology of the Cleveland North and Toledo 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$97,020	\$97,020	\$194,040
05	Surficial geology of the Ashtabula and Youngstown 30 x 60 minute quadrangles (Ohio portion), 1:100,000	\$184,879	\$73,525	\$258,404
06	Surficial geology of the Mansfield 30 x 60 minute quadrangle, 1:100,000	\$124,380	\$89,872	\$214,252
07	Surficial geology of the Findlay 30 x 60 minute quadrangle, 1:100,000	\$97,774	\$97,774	\$195,548
08	Surficial geology of the Marion 30 x 60 minute quadrangle, 1:100,000	\$93,924	\$93,924	\$187,848
09	Surficial geology of the Piqua 30 x 60 minute quadrangle (Ohio portion), 1:100,000	\$107,698	\$107,698	\$215,396
10	Surficial geology of the Lima 30 x 60 minute quadrangle (Ohio portion), 1:100,000	\$123,008	\$123,008	\$246,016
	TOTALS	\$2,335,635	\$1,742,137	\$4,077,772

The STATEMAP component of the National Cooperative Geologic Mapping Program has enabled the Ohio Department of Natural Resources, Division of Geological Survey (DGS) to rapidly and efficiently produce new bedrock and surficial geologic-map information for Ohio. With STATEMAP support, the DGS has, over the past fifteen years, produced more than 2,500 1:24,000-scale maps to depict bedrock geology, bedrock structure, and buried bedrock topography. STATEMAP funding also has been used to develop a statewide digital-map database of geologic information, and to support production of 1:100,000-scale surficial-geology maps for the Ohio portions of fourteen 30 x 60 minute quadrangle areas.

The new framework, geologic-map information of Ohio is used by public- and private-sector entities to address a wide range of critical issues. Bedrock-geology, bedrock-topography, and surficial-geology maps are crucial in the development of bedrock-aquifer and glacial-aquifer maps. Bedrock-geology maps are necessary in the identification of shale-rich rock formations that are susceptible to landslides. Surficial-geology maps delineate the extent of clay and silt deposits at ground surface, which are notoriously unstable and could liquefy as a result of seismic vibration caused by an earthquake. The Ohio Department of Transportation relies on geologic maps when planning and designing new highways and updating transportation infrastructure. For example, specific knowledge of geologic hazards in an area helps planners design safe roads at a lower cost. Geologists involved in mineral-resource exploration and production depend on accurate bedrock-geology, bedrock-topography, and glacial-geology maps along with maps derived from these datasets, such as drift thickness maps, to find and manage Ohio's resources. Ohio Department of Natural Resources, Division of Water and the Ohio EPA rely on DGS maps to delineate aquifers and determine aquifer vulnerability. DGS staff have found that the same geologic maps used for industrial development and resource exploration can be used for environmental protection and land-use planning.

