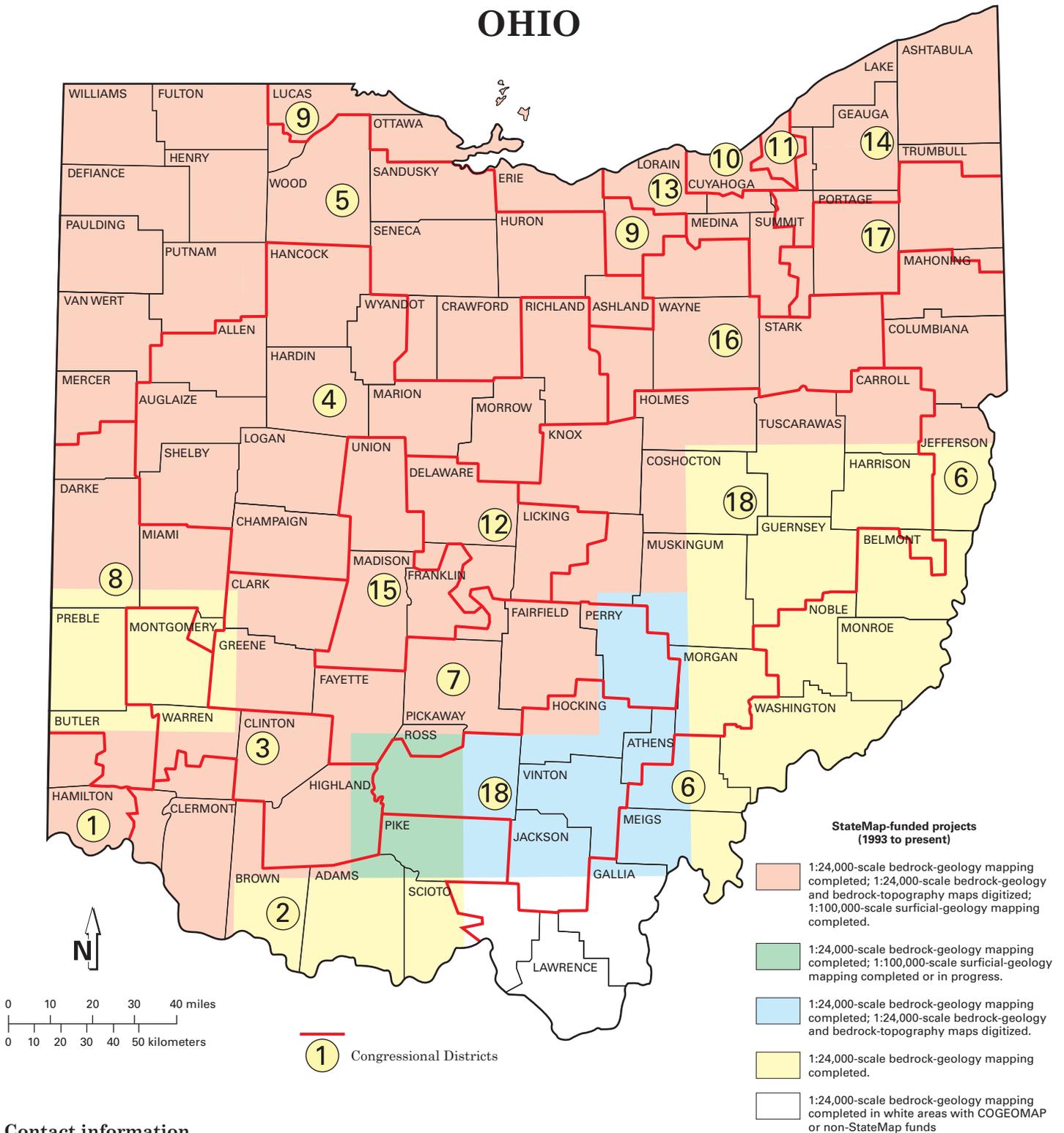


# National Cooperative Geologic Mapping Program

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

## OHIO



### Contact information

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# Summary of StateMap-Funded 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 quads in northwestern & southwestern Ohio, 1:24,000	\$239,071	\$109,874	\$348,945
94	Bedrock geology of 168 7.5-minute quads in north- & south-central Ohio, 1:24,000	\$298,577	\$105,000	\$403,577
95	Bedrock geology of 124 7.5-minute quads in northeastern Ohio, 1:24,000	\$99,910	\$40,000	\$139,910
96	Bedrock geology of 112 7.5-minute quads in southeastern Ohio, 1:24,000	\$86,155	\$86,155	\$172,310
96	Digitization of bedrock-geology and bedrock-topography maps for north- & south-central Ohio	\$47,026	\$47,026	\$94,052
97	Surficial geology of the Cincinnati & Falmouth 30 x 60-minute quads (Ohio portion), 1:100,000	\$118,316	\$112,249	\$230,565
98	Surficial geology of the Lorain & Put-in-Bay 30 x 60-minute quads, 1:100,000	\$84,815	\$84,815	\$169,630
99	Surficial geology of the Cleveland South 30 x 60-minute quad, 1:100,000	\$103,803	\$103,802	\$207,605
00	Surficial geology of the Canton & East Liverpool 30 x 60-minute quads (Ohio portion), 1:100,000	\$99,877	\$99,877	\$199,754
01	Surficial geology of the Newark 30 x 60-minute quad, 1:100,000	\$99,798	\$99,798	\$199,596
02	Surficial geology of the western portion of the Lancaster 30 x 60-minute quad, 1:100,000	\$133,614	\$74,730	\$208,344
03	Surficial geology of a portion of the Springfield 30 x 60-minute quad, 1:100,000	\$95,990	\$95,990	\$191,980
04	Surficial geology of the Cleveland North & Toledo 30 x 60-minute quads (Ohio portion), 1:100,000	\$97,020	\$97,020	\$194,040
05	Surficial geology of the Ashtabula & Youngstown 30 x 60-minute quads (Ohio portion), 1:100,000	\$184,879	\$73,525	\$258,404
06	Surficial geology of the Mansfield 30 x 60-minute quad, 1:100,000	\$124,380	\$89,872	\$214,252
07	Surficial geology of the Findlay 30 x 60-minute quad, 1:100,000	\$97,774	\$97,774	\$195,548
08	Surficial geology of the Marion 30 x 60-minute quad, 1:100,000	\$93,924	\$93,924	\$187,848
09	Surficial geology of the Piqua 30 x 60-minute quad (Ohio portion), 1:100,000	\$107,698	\$107,698	\$215,396
10	Surficial geology of the Lima 30 x 60-minute quad (Ohio portion), 1:100,000	\$123,008	\$123,008	\$246,016
11	Surficial geology of the Defiance 30 x 60-minute quad (Ohio portion), 1:100,000	\$111,798	\$111,798	\$223,596
12	Surficial geology of the Adrian (Ohio portion) & Bellefontaine 30 x 60-minute quads, 1:100,000	\$102,187	\$102,187	\$204,374
13	Surficial geology of the western portion of the Hillsboro 30 x 60-minute quad, 1:100,000	\$77,805	\$77,805	\$155,610
14	Surficial geology of the eastern portion of the Hillsboro 30 x 60-minute quad, 1:100,000	\$66,331	\$66,331	\$132,662
	<b>TOTALS</b>	<b>\$2,693,756</b>	<b>\$2,100,258</b>	<b>\$4,794,014</b>

The StateMap component of the National Cooperative Geologic Mapping Program has enabled the Ohio Department of Natural Resources, Division of Geological Survey (“the Survey”) to rapidly and efficiently produce new bedrock- and surficial-geologic map products for Ohio. With StateMap support, the Survey has, over the past twenty 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 twenty-two 30 x 60-minute quadrangle areas. The resulting surficial-geology information accounts for approximately two-thirds of the state of Ohio.

The new framework, geologic map products for Ohio are 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 both aquifer resource and vulnerability maps. Bedrock-geology maps are necessary in the identification of shale-rich rock formations that are susceptible to landslides. Surficial-geology maps delineate the extents 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. Surficial-geology and bedrock-geology maps are being compared with shoreline recession maps to help determine sediment input into the Lake Erie basin. The Survey has developed a new series of derivative maps, based on traditional surficial-geology maps, to help find and manage Ohio’s aggregate resources and determine site suitability for solid waste disposal facilities and septic systems. And Survey maps are being used to help determine suitable sites for operations related to the Utica/Pt. Pleasant and Marcellus shale plays in eastern Ohio.