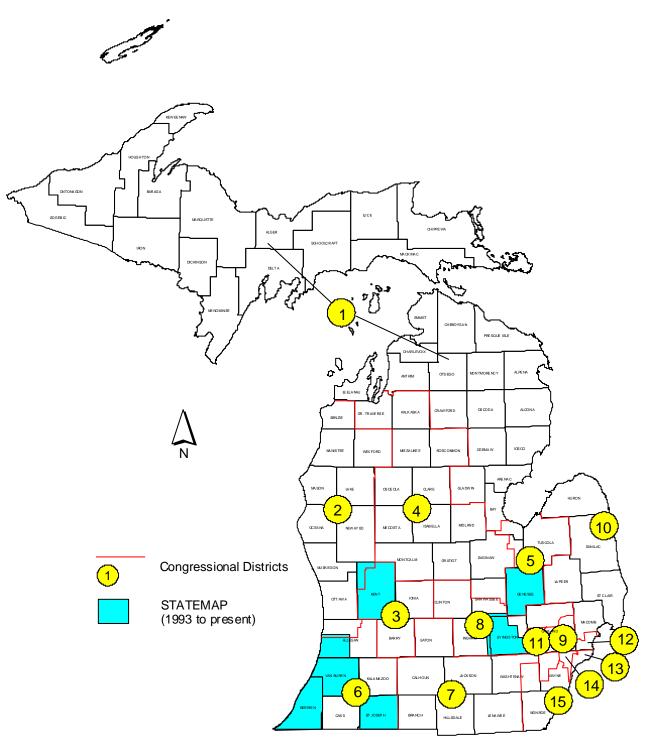




## **National Cooperative Geologic Mapping Program**

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

## **MICHIGAN**



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## SUMMARY OF STATEMAP GEOLOGIC MAPPING PROGRAM IN MICHIGAN

Federal Fiscal Year	Project Title & Scale	Project Phase	State and Local Funding	Federal Funding	Total Project Funding
1995 1996 1997	Surficial Geology of <b>St. Joseph County</b> , 1:24,000 Western Michigan University	Year 1 Year 2 Year 3	+ - ,	\$ 15,000 \$ 51,826 \$ 45,386	\$ 30,088 \$103,766 \$ 90,880
1996 1998 1999	Surficial Geology of <b>Kent County</b> , 1:24,000 Michigan State University	Year 1 Year 2 Year 3	+ -,	\$ 25,420 \$ 40,000 \$ 52,837	\$ 50,840 \$ 85,864 \$107,679
1998 1999 2000 2001	Surficial Geology of <b>Van Buren County</b> , 1:24,000 Western Michigan University	Year 1 Year 2 Year 3 Year 4	\$ 40,580 \$ 42,503	\$ 21,000 \$ 40,575 \$ 42,507 \$ 46,183	\$ 42,962 \$ 81,155 \$ 85,010 \$ 92,948
2000 2001 2002	Surficial Geology of <b>Genesee County</b> , 1:24,000 Michigan State University and the Michigan Geological Survey	Year 1 Year 2 Year 3	\$ 31,217	\$ 49,128 \$ 31,080 \$ 33,875	\$ 98,256 \$ 62,297 \$ 68,082
2003 2004 2005	Surficial Geology of <b>Livingston County</b> , 1:24,000 Michigan Geological Survey	Year 1 Year 2 Year 3	+ /	\$ 30,164 \$ 30,387 \$ 22,398	\$ 60,328 \$ 60,774 \$ 44,796
2002 2003 2004	Surficial Geology of <b>Allegan County</b> , 1:24,000 Western Michigan University	Year 1 Year 2 Year 3	+ / -	\$ 41,125 \$ 30,071 \$ 25,423	\$ 82,352 \$ 60,142 \$ 50,846
		TOTALS	\$684,680	\$674,385	\$1,359,065

The STATEMAP portion of the National Cooperative Geologic Mapping Act (NCGMP) has been of great service to the Michigan Department of Environmental Quality, Office of Geological Survey's efforts to produce high-quality, large-scale maps of the surficial geology of Michigan. Since 1995, STATEMAP funding has supported mapping the glacial materials that dominate Michigan's land surface. The accomplishments of STATEMAP in glacial mapping are important because ground-water yield, soil fertility, erosion potential, drainage, load-bearing capacity and suitability for construction materials all depend on glacial sediments. Michigan's economy and the welfare of its citizens are tied directly to these deposits. Planning officials, industry and the public will use this new geologic map information to make informed decisions on issues regarding natural resources for sustainable economic development. For instance, consultants used the Kent County map to create a more accurate ground-water model of a contamination site in Cascade Township which, in turn, helped assess the effectiveness of the pump and treat system installed at the site. The Kent County surficial-geology information gave a better understanding of how aquifer characteristics varied across the area, leading to improved decisions regarding strategies to remediate the site.

Michigan's continued economic growth and the security of its people and environment are related to fundamental issues involving resources. Competition for land, water, mineral and biological resources by developers, industrial and mining interests, environmental action groups and private citizens has led to complex and often conflicting public-policy options needed for managing resources. It then becomes a formidable task for local and state decision-makers to ensure and promote economic growth. The water, land and mineral resource needs of a growing population must be met while managing the environment in a sustainable manner. Decisions made without an adequate base of earth-science information often increase the costs and risks to society and the environment. STATEMAP geologic mapping projects such as those listed above provide local government with basic earth-science information that is critical for evaluating land-use activities and ensuring that enacted policies reflect smart-growth options.