

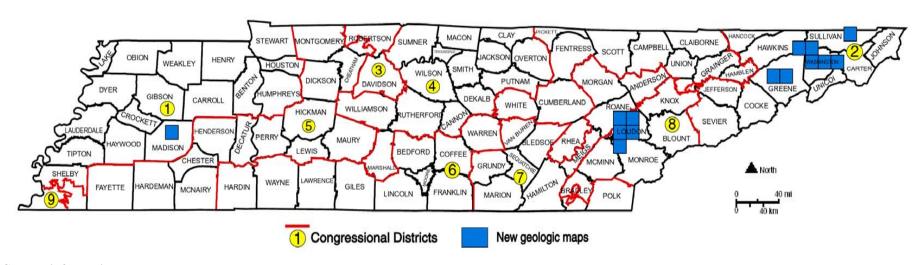


United States Geological Survey



National Cooperative Geologic Mapping Program STATEMAP Component: States compete for federal matching funds for geologic mapping

TENNESSEE



Contact information

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SUMMARY OF STATEMAP GEOLOGIC MAPPING PROGRAM IN TENNESSEE

Federal Fiscal Year	Project Title / Scale	State Dollars	Federal Dollars	Total Project Dollars
1994	Greeneville Geologic Map, 1:24,000	\$15,000	\$15,000	\$30,000
1995	Johnson City and Bristol Geologic Maps, 1:24,000	\$12,468	\$12,468	\$24,936
1996	Lenoir City Geologic Map, 1:24,000	\$11,688	\$11,688	\$23,376
1998	Jonesborough Geologic Map, 1:24,000	\$16,000	\$16,000	\$32,000
1999	Loudon Geologic Map, 1:24,000	\$16,864	\$16,864	\$33,728
2000	Sweetwater, Philadelphia, and Cave Creek Geologic Maps, 1:24,000	\$28,134	\$28,134	\$56,268
2001	Jackson North, Sullivan Gardens, and Leesburg Geologic Maps, 1:24,000	\$50,928	\$50,928	\$101,856
2002	Lovelace and Mosheim Geologic Maps, 1:24,000	\$38,100	\$38,100	\$76,200
	TOTALS	\$189,182	\$189,182	\$378,364

Detailed geologic mapping began in Tennessee in 1964, when the Tennessee Division of Geology started a new series of 1:24,000-scale geologic quadrangle maps that included a mineral resources summary. In addition to delineating geologic formations, these maps show all known information on occurrence, mining, reserves, and exploration of mineral deposits and construction materials found in each quadrangle area. This series was recently expanded to include a section on environmental geology. When the number and severity of environmental hazards such as landslides or sinkholes is significant, a separate environmental map showing the location of these hazards is also included in the geologic map package. Although 489 of Tennessee's 804 quadrangles (61 percent) have already been mapped and published, limited funding for mapping personnel has hampered this effort in recent years.

STATEMAP has enabled the Tennessee Division of Geology to increase production of these 1:24,000-scale geologic maps by at least one additional map per year. Over the past eight years, STATEMAP has helped support geologic mapping of bedrock materials and identification of geologic hazards and potential mineral resources in 14 quadrangles in Tennessee. These quadrangles were prioritized by the Tennessee Mapping Advisory Committee on the basis of a high degree of urbanization, significant numbers of environmentally sensitive sites and facilities, potential geologic hazards including active cave development and solution openings, and a notable lack of available geologic data. Availability and potential contamination of ground water is also of prime concern in many of these areas. These geologic maps are the basic source of information for people engaged in environmental regulatory work, mineral and/or oil and gas exploration, geologic hazard assessment and mitigation, building site evaluation, and many other practical as well as scientific uses.