

## SUMMARY OF STATEMAP GEOLOGIC MAPPING PROGRAM IN NEW YORK

Federal Fiscal Year	Surficial Geologic Maps, 1:24,000	Bedrock Geologic Maps, 1:24,000	Federal Funding	State Funding	Total Project Funding
1993	White Plains	White Plains	\$9,000	\$11,052	\$20,052
1994	South Onondaga	South Onondaga	\$20,000	\$29,759	\$49,759
1996	Otisco Valley, Tully	Otisco Valley, Tully, Mt. Kisco ( $\frac{1}{3}$ )	\$63,663	\$67,014	\$130,677
1997	Marcellus, Jamesville	Marcellus, Jamesville, Angelica, Mt. Kisco ( $\frac{1}{3}$ )	\$85,162	\$93,939	\$179,101
1998		Mt. Kisco ( $\frac{1}{3}$ )	\$10,149	\$16,489	\$26,638
1999	Skaneateles	Ashford Hollow, Monroe, Skaneateles	\$66,848	\$83,989	\$150,837
2000	Spafford	West Valley, Sloatsburg, Spafford	\$79,238	\$81,739	\$160,977
2001	<i>South Onondaga</i> , Tully, Otisco Valley	<i>South Onondaga, Tully, Otisco Valley</i> , Marcellus	\$14,000	\$15,190	\$29,190
2002	Oran	Delavan, Oran, <i>Sloatsburg</i>	\$70,000	\$72,849	\$142,849
2003	DeRuyter	DeRuyter, Ellicottville, Thiells	\$77,476	\$82,938	\$160,414
2004	<i>Oran</i> , Ossining ( $\frac{1}{2}$ )	Greenwood Lake, Owasco, Warwick	\$89,581	\$93,112	\$182,693
2005	Syracuse West, Ossining ( $\frac{1}{2}$ )	<i>Canaan, Chatham, East Chatham, Hudson North, Kinderhook, Ravena, Stottville, State Line</i>	\$48,846	\$51,617	\$100,463
2006	Croton Falls, Camillus	Maybrook	\$49,840	\$53,925	\$103,765
2007	Syracuse East, Hopewell Junction, Thiells, <i>Clintondale Rosendale, Poughkeepsie, Hyde Park</i>	Cornwall	\$90,972	\$105,688	\$196,660
2008	Phoenicia, Manlius	<i>Cementon, Hudson South, Claverack, Hillsdale, Egremont Saugerties, Clermont, Ancram, Copake</i>	\$185,575	\$197,523	\$383,098
2009	Baldwinsville, Shandaken	Pleasant Valley	\$182,102	\$345,449	\$527,551
2010	Seneca Falls, Bearsville, Pine Island	Westerlo, <i>White Plains</i>	\$180,834	\$220,526	\$401,360
2011	Jordon, Unionville, Victory	Champlain, Rensselaerville	\$192,166	\$239,995	\$432,161
2012	Cato, Lysander, Keene Valley, <i>Roundout Reservoir</i>	Altamont	\$166,158	\$203,147	\$369,305
2013	None produced	None produced	\$0	\$0	\$0
<b>Totals</b>	<b>38 quadrangles</b>	<b>53 quadrangles</b>	<b>\$1,681,610</b>	<b>\$2,065,940</b>	<b>\$3,747,550</b>

***Bold face italic = digitize***

STATEMAP-supported geologic mapping in New York provides fundamental data, essential in addressing several issues of immediate importance. Parts of the state are densely populated and in these areas, the surrounding suburban communities are expanding. Development, expansion of roads and highways, and the search for new domestic and energy industry related water supplies, all combined with failing infrastructure, require immediate action. New York requires accurate, detailed, and complete geologic mapping at 1:24000 scale to meet the needs of state and local officials who deal with the aforementioned issues. Surficial geologic maps indicate the potential location of water supplies and construction aggregates as well as delineating regions wherein drainage or engineering properties of the ground indicate that development should proceed with caution. Such maps are needed to protect ground-water supplies and remediate contaminated ground water. New mapping efforts are combining traditional surficial mapping techniques with borehole data to produce three-dimensional geologic maps complete with cross sections and stratigraphic columns. Bedrock geologic maps guide extraction of mineral resources and provide essential information for major construction projects. Structural data on these maps indicate potential pathways for contaminant migration.

From its inception, the New York STATEMAP project has been directed by several criteria. Priority is given to regions containing transportation and energy corridors including roads, pipelines, and electric transmission lines. Such areas generally coincide with interstate highways and the St. Lawrence Seaway. Mapping projects are designated to be useful at the county level and therefore provide maps at 1:24000 scale. One example of ongoing STATEMAP work in Ulster County, southeastern New York, seeks to address growing concerns over slope failure and water quality. Fine grained clay deposits eroding within the watersheds of the eastern Catskills are directly impacting the New York City water supply, as well as land stability in residential areas. Three-dimensional surficial geologic mapping, done in conjunction with the New York City Department of Environmental Protection (NYCDEP) Stream Management division, is plotting the distribution and thickness of these sediments to predict likely sources of suspended sediment and future landslide localities.