The division of Soil Survey Investigations (SSI) was created in 1952 with the reorganization of the USDA. Memorandum 1318 of the Secretary of Agriculture (October 14, 1952) transferred many Bureau of Soils research activities from the former Bureau to the Agriculture Research Service. SSI, merging the former Bureau of Soils and the Soil Conservation Service (SCS), retained those research activities supporting soil classification, mapping, and study of soil behavior and change. Dr. Guy D. Smith became its first Division Director. Those efforts of the Division of Chemistry and Soils that had dealt with soil characterization and mineralogy became the Soil Survey Laboratories under Dr. L.T. Alexander (Fig. 1). The remaining field department, the Soil Geomorphology Projects, came under Dr. R.V. Ruhe. Dr. Smith closely coordinated the two parts.

The decision in 1951 to develop a new soil classification system carried over to the Soil Survey Staff of the reorganized SCS (Kellogg, 1960) (Fig. 2). In response to the decision, the SSI Division led the National Cooperative Soil Survey in the supporting research for development of the new soil classification system. This research included soil sampling and laboratory analysis in cooperation with the states and Washington, DC Field Staff at five sites. Development of Soil Taxonomy was accomplished through a series of approximations and was published in 1975 (Soil Survey Staff, 1975). The achievements and challenges of Soil Taxonomy’s development were published in seven papers by authors who were colleagues of Guy Smith (Grossman et al., 1982).

This article is the first of a two part series. The objective of this first article is to document some of the research contributions of SSI and Laboratories in the development of concepts, now commonplace and accepted, that underpin Soil Taxonomy. The second article will document the contributions of geomorphic research and the regional geomorphic projects that were initiated in the 1950s. In the beginning and continuing to the present, Soil Survey Investigations is a collaboration of federal, state, university, and international scientists.